



# Smart Computing

**& CONSUMER ELECTRONICS**

## In Plain English

January  
2010  
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# The Single PC Home



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**9 MILLION CUSTOMERS HAVE VOTED.**

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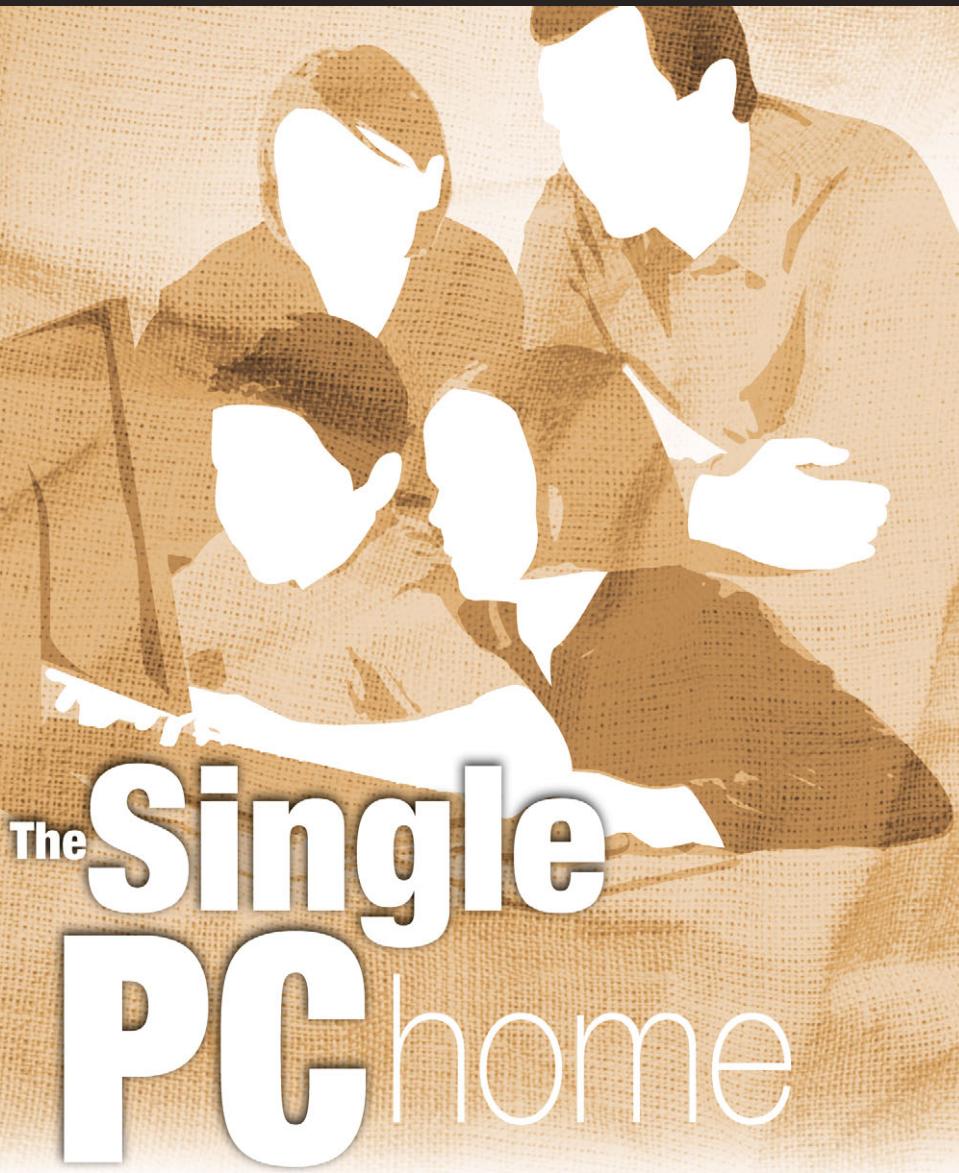
# Smart Computing

In Plain English®

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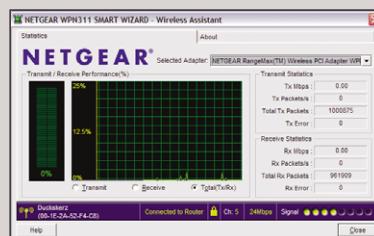
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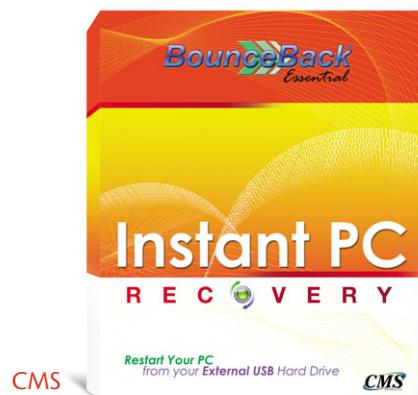
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## Editor's Note

Remember the good ol' days when most of your family ignored the computer? Sure, that beige, boxy PC was temperamental, and you had a slow, spotty dial-up connection back then, but it was all yours. When you powered on the computer in the morning, the icons were all exactly where they were when you powered it off the night before.

Those were the days.

Today, of course, everyone uses the computer: your spouse, your kids, and the occasional guest. And all of them (except the guests, if they want to come back) demand their own Desktops and their own places to store data. Some of them will expose the PC to online threats, and others will inadvertently change important settings as they learn their way around the PC (just as you did, remember).

That's why this issue shows the family administrator (that would be you, I'm betting) how to keep this workhorse computer in good shape. We show you how to create those separate Desktops and keep the system secure. We pay particular attention to the family that shares a single PC, but if you have multiple PCs, you can (and should) apply these tips to all of the computers in your house that have more than one user.

While you're at it, your computer's peripherals and desk could probably use a good cleaning, too. Don't miss our "DIY Project: Clean Your Workspace" article on page 34 and get the year off to a good start.

Joshua Gulick

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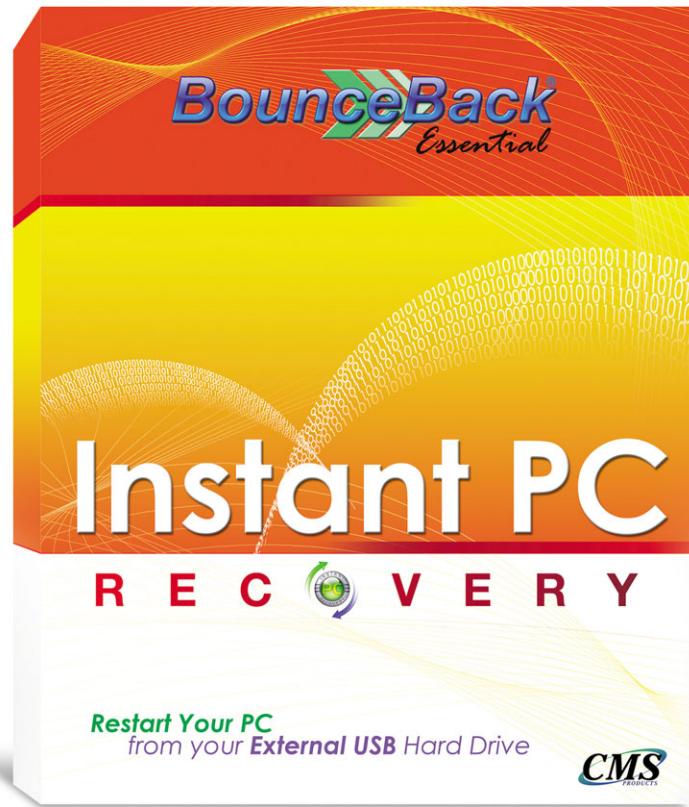
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## Set It & Forget It Backup

Sure, you have backups. But if your computer's hard drive fails and takes your operating system with it, could you really get your computer up and running, as though nothing had happened, in a matter of minutes? If you're the least bit unsure, you're not backing up with BounceBack Essential Instant PC Recovery software.

### How It Works

BounceBack Essential makes a copy of your entire PC on a spare hard drive: your operating system, programs, documents—everything. It routinely checks your computer for changes (such as that home video you edited or the new photos you added last night) and keeps the

backup copy up-to-date. This is a true “set it and forget it” backup.

If your computer crashes, you can use BounceBack Essential's Instant PC Recovery mode to start the computer from your backup hard drive. Thanks to this feature, you can access all of your applications and data without trouble. With two clicks, you can replace your computer's damaged operating system with this healthy copy of your PC.

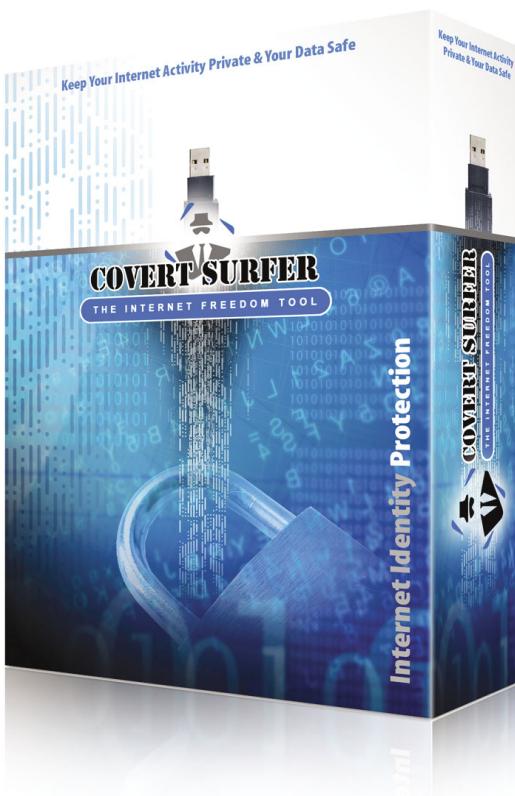
### Features & Benefits

- Use any internal or external hard drive to create a full system backup.
- Continuous Data Protection means you can set it and forget it.
- Instant PC Recovery lets you

immediately start your crashed PC to run applications and access data.

- Two-Click Restore returns your computer to health quickly and without any extra effort on your part.
- BounceBack Ultimate (\$69 full version; \$49 upgrade) gives you even more control. It lets you back up your PC to multiple destinations, keep your data secure with strong encryption, and store multiple versions of files.





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## Identity Theft Protection On The Go

In a recent college campus Internet security survey, identity theft, invasion of privacy, and cookie cleaning were the top three concerns. Covert Surfer, the Portable Internet Freedom Tool, uses National Institute of Standards and Technology (NIST)-approved 256-bit AES encryption to protect your identity and personal information while you are surfing the Internet.

### How It Works

Covert Surfer automatically changes your IP address; encrypts your Internet connection (including wireless); and erases cookies, Internet history, and cached files that are left on your computer. Covert Surfer eliminates any trace of your presence on your computer. Hackers, ISPs, or other individuals who attempt to pry into your computer can't observe what Web sites you are browsing, emails you are reading, or even your actual location.

Covert Surfer also reduces the amount of spam you receive by blocking cookies that can provide information to Web sites.

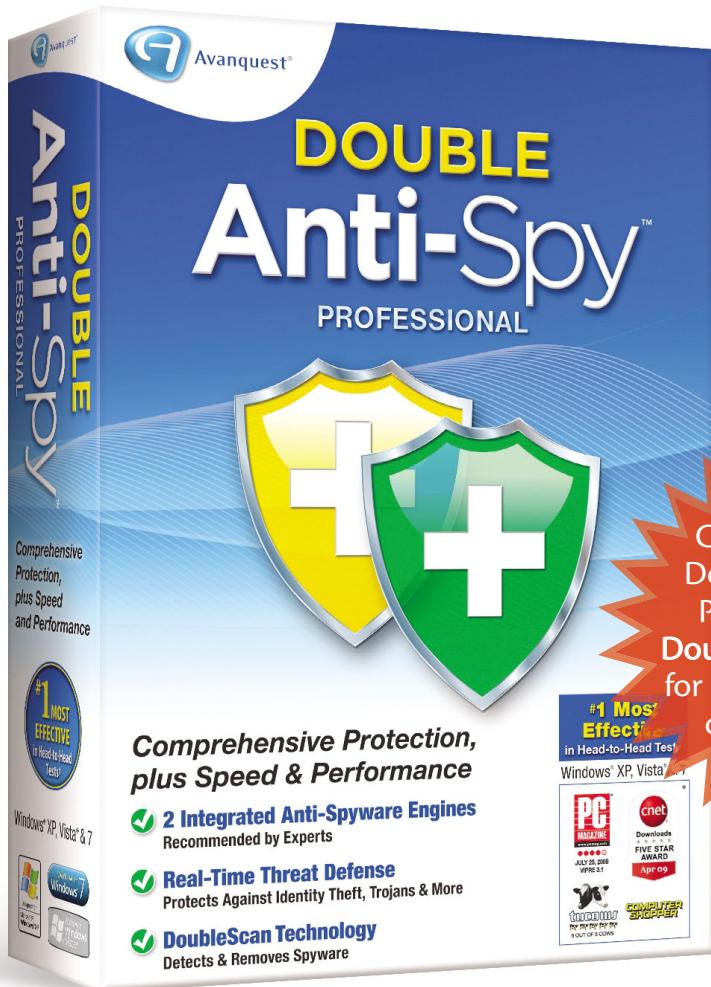
### Features & Benefits

- Completely portable & easy to use. Simply download to a USB drive and take it with you.
- Provides security for Wi-Fi (wireless) networks to include cellular wireless cards (EVDO and others), as well.
- Prevents others from seeing what Web sites you visit and what content you are looking at, protecting your identity using NIST-approved 256-bit AES packet encryption.
- Protects your passwords, user-names, and account numbers as you securely and anonymously surf the Internet.
- Automatically deletes cookies, preventing Web sites and others from collecting information about you.

- Automatically erases your temporary Internet files and history via our Registry Clean process.
- Safely stores all of your important information using the built-in File Encryption tools.
- Leaves NO trace of your Internet activity on the computer or laptop.
- File shredding: Permanently destroy files beyond current forensic technology.

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## Keep The Performance, Lose The Spyware

Is your PC protected from spyware? If not, your personal information may be at risk. Tech-savvy thieves use spyware to collect the data they need to commit identity theft. Without anti-spyware protection, you won't know when spyware sneaks onto your computer.

### How It Works

Thanks to two spyware-identification engines, Double Anti-Spy Professional is the only software you need to protect your PC from adware and spyware, including particularly harmful bugs, such as keyloggers, Trojans, and worms.

Double Anti-Spy Professional roots out deeply entrenched spyware and other malware. You can schedule deep system scans to run when your computer stands idle or run a quick diagnostic scan when you suspect an infection.

The software also uses heuristic spyware detection to catch new versions of spyware in real time, which means that your PC is protected against the spyware it faces today and the generation of spyware it will see tomorrow.



**Avanquest®**

### Features & Benefits

- Secures a PC without significantly impacting its performance
- DoubleScan Technology hunts down the latest spyware in real time
- Multiple scan types let you perform quick checks and deep cleans
- Auto Update keeps Double Anti-Spy Professional up-to-date for one year
- Supports Windows XP/Vista/7 (Both 32-bit and 64-bit support for Vista/7)

Compiled by Christian Perry

Illustrated by Lori Garris

## DESKTOPS &amp; LAPTOPS

# When Netbook Meets Ereader

The netbook rage continues to flood the market with a wide variety of models that feature increasingly innovative bells and whistles. But when it comes to a truly unique design, the “edge” goes to enTourage, which has created the world’s first dualbook, complete with an ereader and a netbook on separate screens.

The enTourage eDGe (\$490; [www.entourageedge.com](http://www.entourageedge.com)) flips open to reveal two screens, with an ereader on the left and a standard netbook screen on the right. According to Asghar Mostafa, president and CEO of enTourage Systems, the plan was hatched after he asked his kids if they liked the idea of using an ereader in their daily lives.

“They explained to me that because an ereader has limited functionality, they probably wouldn’t use it. They want a device that allows them to browse the Internet, email their friends, play games, listen to MP3s, watch videos, take notes, highlight—these are key features they depend on other electronics for and what we have integrated into the enTourage eDGe,” Mostafa says.

Powered by Google’s Android operating system and the Marvell Armada PXA168 processor, the eDGe weighs less than 3 pounds and has a 10.1-inch (1,024 x 600 resolution) screen for the netbook and a 9.7-inch (1,200 x 825 resolution) screen for the e-paper side.

**The enTourage eDGe combines both an ereader and a netbook to let you simultaneously read books, write in journals, and perform general Internet and productivity tasks.**



You can use the netbook in portrait or landscape mode or flip it 180 degrees. Thanks to the ereader’s E Ink technology, you can take notes directly on ebooks or open a journal page and draw or type text using a virtual keyboard.

enTourage Systems also launched an ebook store on its Web site that offers more than a million free public-domain books that have been digitized by Google. Also available on the site are thousands of professional and trade ebooks through the company’s partnership with Ingram Digital as well as 175 popular periodicals provided by LibreDigital.

“We saw a need in the market to not only provide a superior device, but to create an entire ecosystem to meet the users’ needs,” Mostafa explains. “The ecosystem includes the ebook store available on our Web site, where users can download all types of publications; back up their files, notes, documents, etc., on Entourage Systems’ servers; share data; and use the Google Android operating system for third-party applications—all of which provide a controlled environment for the complete user experience.” ▀

## STORAGE

## DVDs That Outlive You

**R**ecording your valuable files and photos on DVDs and other optical media seems like a smart idea if you want to preserve them. After all, what could go wrong? The answer is plenty, as discs degrade over time if not stored properly or if the data wasn't burned well. Although some discs can last 50 years or more under good conditions, others might start to degrade after just a few years.

A company called Cranberry ([www.cranberry.com](http://www.cranberry.com)) claims that the life expectancy of CDs and DVDs is just two to five years, spurring it to create the DiamonDisc. According to Cranberry, these DVDs will last 1,000 years because they have no adhesive layers, no dye layer, and no reflective



layer. Further, the company uses a high-intensity layer that etches data into the diamond-like surface of these synthetic stone discs.

If you'd like your files to be around for 1,000 years, you'll pay handsomely for that privilege. Each disc costs \$34.95 (for 4.7GB), and you won't be able to burn any data on them using your own DVD burner. Instead, you'll need to upload your files to Cranberry or snail-mail them to the company, and Cranberry will "etch" the files onto a disc and mail it back to you. Of course, you'll just have to hope that DVD players are still around 100 years from now, let alone 1,000 years from now. ■

## DISPLAYS

## A Little Brother For Your Monitor

**L**CD monitors are getting bigger and more affordable than ever, but it's not always practical to use a dual-monitor configuration if desk space is limited. However, because the advantages of two monitors vs. just one are undeniable—even for casual computer users—it can be worth investigating alternative monitor choices that offer similar benefits. Mimo's 7-inch USB monitors can fill the bill for those short on space.

The 710-S (\$129.99; [www.mimomonitors.com](http://www.mimomonitors.com)) is a foldable, portable monitor that weighs less than a pound and plugs into a USB 2.0 port to extend the display of your desktop or laptop computer. With this little monitor, you can have instant messaging or email windows on-screen all the time without them cutting into your primary display's real estate. Or you can put all of your Windows gadgets (such as weather, to-do lists, and system performance utilities) on it, open your media player on it to control entertainment playing on your home-theater system, or use it to monitor online auctions.

The 710-S operates in landscape or portrait mode and stands on its own. Installation is simple—just install the included driver software and connect the monitor to a USB port. Mimo also offers the 720-S (\$209.99), which is identical to the 710-S, but it includes a touchscreen. Both monitors have a display resolution of 800 x 480 and a contrast ratio of 400:1. ■



This Mimo display measures 7 inches, weighs less than a pound, and connects to a USB port on your computer to extend your computing environment.

## PRINTERS &amp; PERIPHERALS

## A Photo Frame With More Than Good Looks

**W**hen friends and family admire photos on your digital photo frame, wouldn't it be cool to immediately print a copy for them? Sony's DPP-F700 (\$199.99; [www.sonystyle.com](http://www.sonystyle.com)), a digital frame with a built-in printer, lets you do just that.

The DPP-F700 doesn't skimp on features just for the sake of including both a frame and printer. The device can print 4- x 6-inch, 300 x 300 dpi (dots per inch) photos in as little as 45 seconds, and you can even edit photos before printing with options such as enlarge, reduce, crop, border/borderless, brightness, contrast, hue, and sharpness. A Creative Print mode includes more than 30 templates for making photo calendars, printing identification photos, or creating single sheets that include multiple images (also called layout prints).

For viewing, the device has a 7-inch display with 800 x 480 resolution, and it supports JPEG (Joint Photographic Experts Group), TIFF (Tagged Image File Format), and BMP (bit map) image file formats. Images can be transferred to the DPP-F700 using a direct USB connection from your computer or by using compatible memory cards. The

device includes about 1GB of internal storage, along with an auto-resizing adjustment function that downsizes photos to allow storage of up to 2,000 photos. Also included is a remote control that lets you access many of the device's view and print modes. ▀



Your digital photo frame doesn't need to just sit there and look pretty. The Sony DPP-F700 serves as a frame and a photo printer, all in one package.

## CPUs, CHIPS &amp; CARDS

## System Optimization Made Easy

**T**he newest generation of high-speed busses has arrived, tempting early adopters to show off their USB 3.0-enabled systems to their neighbors. Asus has released one of the first motherboards using both USB 3.0 and 6Gbps (gigabits per second) SATA (Serial Advanced Technology Attachment), the Xtreme Design P7P55D-E.

At \$299, the Premium version of this motherboard doesn't come cheap, but Asus ([usa.asus.com](http://usa.asus.com)) certainly delivers plenty of bang for the buck. Aside from the aforementioned USB 3.0 support, one of the board's more interesting features is its TurboV, a second "hybrid" microprocessor that offers intuitive optimization options.

For example, you can automatically tune your system and let the motherboard determine the best overclocked rates while ensuring system stability. If you want to tweak your system to your preferences, you can do so by overclocking your system without the need to reboot. There's also a Turbo Key, a hotkey that lets you set a boost configuration that goes into effect when you press the keystroke.

The P7P55D-E also includes a wired remote control that lets you activate the Turbo Key, adjust CPU bus speed, adjust power settings, or perform other functions, all without the need for entering the BIOS (Basic Input/Output System). Finally, the board has a miniature operating system, called Asus Express Gate, that lets you access the Internet in a mere five seconds without booting into Windows. ▀



Not only does the Asus P7P55D-E include support for USB 3.0, but it also integrates a wealth of overclocking-friendly options that make system optimization as easy as pressing a button.

## DIGITAL MISCELLANEA

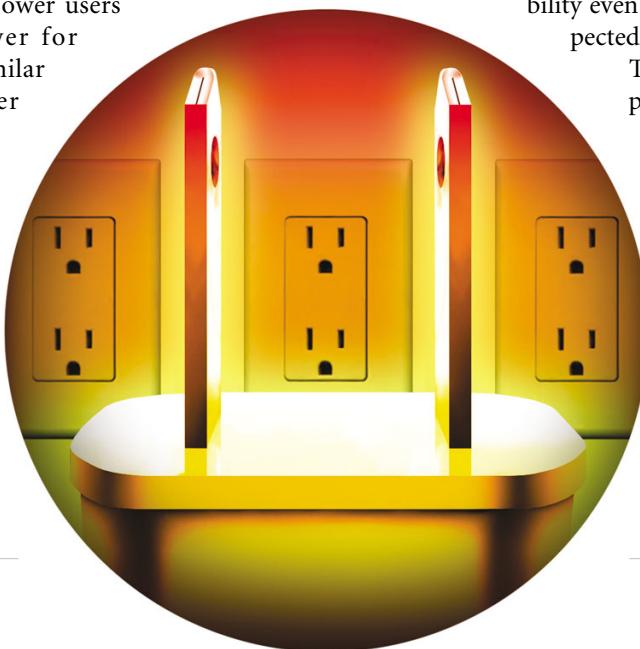
## A Power Supply For Power Users

**A**lthough the current big trend in computing is green technology, there's no denying that today's desktop PCs can consume massive amounts of power for certain applications. For power users who need major horsepower for video editing, games, and similar applications, big-time power supply units are a must to prevent systems from crashing during intensive computing sessions.

Perhaps it's no surprise, then, that Antec has unveiled its first 1,200-watt PSU (power supply unit), complete with PowerCache, a high-performance capacitor that stores extra power for when an extra boost is required. The

TPQ-1200 (\$299.99; [www.antec.com](http://www.antec.com)) has that PowerCache technology wired at the end of its CPU, graphics, and motherboard connectors, helping to ensure stability even when systems demand an unexpected rise in power.

The cooling demands for high-performance power supplies can be significant—and, in turn, require fans that are noisy and annoying. However, the TPQ-1200 includes an 80mm Pulse Width Modulation fan that runs up to 50% quieter than standard voltage-controlled fans, according to Antec. The PSU also features the company's Advanced Hybrid Cable Management, which helps reduce cable clutter. ▀



### PROBLEM-SOLVER: TROUBLESHOOTING THE NEWS

#### My external hard drive causes annoying pauses in programs when it wakes from Sleep mode.

If you have an external hard drive that goes to sleep after a certain period of inactivity, it might interfere with programs you're currently using when it wakes from Sleep mode. You can prevent it from going to sleep by using NoSleepHD, which writes empty text files to the drive every few minutes. Download this free program from nosleephd.codeplex.com.

#### I can't access programs when using only one monitor of my dual-monitor setup.

If you don't have access to your second monitor (for example, if

you're using your laptop but you're not at home to hook up your second monitor), you might find that a program opens on the non-existent second monitor. To access it, press ALT-TAB and select the program. Press ALT-Spacebar, press *R*, press ALT-Spacebar again, press *M*, and then use the arrow keys to move the window back onto your primary Desktop.

#### My prints are too light even though I have new ink cartridges.

Light prints when the ink cartridges are full (or even semi-full) are a sign of clogged print heads. Access your printer's utility program (if it's not a separate program,

you might find it listed in your printer's control panel) and initiate the cleaning function.

#### After installing new RAM, my PC boots but will not show anything on the monitor.

If you didn't have any display problems before installing the new memory, and if you installed more than one RAM module, try installing just one module at a time to rule out a potentially faulty part. Also, if you have a graphics card, make sure it's firmly seated in the motherboard slot—cards can get bumped out of place when installing memory. ▀

## CONVERGENT TECH: PDAs &amp; SMARTPHONES

## Behold An Early Android Phone

The wave of Google Android-powered phones is right around the corner, but you don't need to wait to try this innovative mobile operating system. The Samsung Behold II smartphone has an early start on the Android phenomenon, and it packages plenty of useful functions around the up-and-coming operating system.

The Behold II (\$229.99 with T-Mobile Even More plan; [www.t-mobile.com](http://www.t-mobile.com)) features Samsung's TouchWiz user interface, which lets you easily customize the phone with widgets accessible in a slide-out tray on the left side of the phone's 3.2-inch AMOLED (active-matrix organic light-emitting diode) screen. TouchWiz also delivers one-touch access to favorite and commonly used functions and applications. Further, the Behold II includes three home screens onto which you can drag and drop widgets and organize workspaces with widgets and shortcuts.

Beyond the Android OS (operating system), Google has a big presence on the Behold II, which has built-in Google mobile services, such as Google Search, Google Maps, Gmail, Google Talk, and YouTube. Users also have access to thousands of free and paid applications and games

available for download from the Android Market ([www.android.com/market](http://www.android.com/market)). These apps cover the gamut from productivity, communication, and finance to entertainment, multimedia, and games.

This smartphone includes a 5MP (megapixel) camera with autofocus, flash, and five shooting modes. Also onboard are video capture and playback, music player, microSD memory slot, 3G capability, built-in GPS (global positioning system), stereo Bluetooth, speakerphone, and photo caller ID. A photo gallery provides easy access to all of the phone's stored photos and videos, including the ability to create additional folders for specific topics or dates. The phone's integrated Wi-Fi comes with an application that provides an intuitive glance at all of the available networks in your area, and connecting is as easy as clicking one of the icons that represents your desired destination.

Although the Behold II includes a range of utilities designed by Samsung, you'll have the choice to use similar utilities that are part of the default Android operating system. Of course, if you don't like any of the included utilities, you'll find plenty of other choices from the Android Market. ■



Powered by Google's Android operating system, the Samsung Behold II offers a wide range of Google applications, along with plenty more applications available for download at the Android Market.

## DULY QUOTED

**“They follow a predictable pattern. They say there’s a problem with your account or we want to give you some kind of benefit.”**

—Arizona Attorney General Terry Goddard describes recent online scams that continue to proliferate in email messages.

Part of that predictable pattern is poor spelling, as evidenced in a recent scam email purporting to come from

Bank Of America and signed by the “Cheef” of Bank of America’s Survey Team.

Source: ABC15.com

# News From The Help Desk

## Our Most Common Tech Calls

COMPILED BY KRIS GLASER BRAMBILA

*Each month, we receive numerous technical support calls and email messages. Some computer problems are fairly common, and we find that many callers struggle to resolve the same issues. In this article, we cover some of the most common or timely tech support questions and provide our solution for each of them.*

**Q** When I try to update my computer using Microsoft's Windows Update, I receive the error code 0x80070020 and the following message: The process cannot access the file because it is being used by another process. I don't think Windows Update is being used anywhere else, so how can I update my computer?

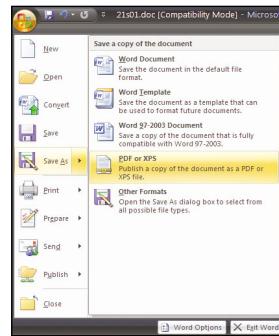
**A** This problem most often occurs when a program on your computer, such as antivirus software, interferes with the update process. To solve this problem, first try rebooting your computer. Then, go to Start, choose All Programs, and click Windows Update to install available updates.

If rebooting doesn't enable your computer to update correctly, the next step is to disable any antivirus software you have installed. The directions for disabling your antivirus software will differ depending on which program you are running. Typically, you can right-click your antivirus' icon on the Taskbar to disable or exit the program. Check your program's help section for more detailed information. Once your antivirus is disabled, try updating your computer again. If this doesn't work, you may also try disabling your firewall. Go to the Control Panel and click Security Center (Security in Windows Vista, System And Security in Windows 7). Next, click Windows Firewall and choose the Off option (in Vista, choose Turn Windows Firewall On Or Off, then select the Off option; in Win7, click Windows Firewall, choose Turn Windows Firewall On Or Off, and check mark Turn Off Windows Firewall). Be sure to enable your antivirus software and firewall after installing updates.

If these suggestions don't fix the problem, you can continue troubleshooting by pointing your browser to support.microsoft.com and searching for "80070020 error."

**Q** I want to create a PDF (Portable Document Format) file from a form I created using Microsoft Word 2007. Is there a way that I can save Microsoft Office documents as PDF files?

**A** By default, Microsoft Office 2007 does not allow you to save documents as PDF files. But you can download



Once you download Microsoft's add-on, you can save your Office documents as PDF files.

a special add-on from Microsoft's Web site that will add this option to Word's Save As menu.

To get the add-on, point your browser to [www.microsoft.com/downloads](http://www.microsoft.com/downloads) and search for "2007 Microsoft Office Add-in: Microsoft Save as PDF or XPS." From the results list, click the link with the same name. On the download page, click the Download link in the blue box and save the file to your hard drive. When the download is complete, locate the file and double-click it to start the installation. Once the add-on is installed, you can save your work as a PDF file by clicking the Office button. Mouse over Save As and choose PDF Or XPS. The familiar Save As dialog box will appear and let you name your document. Note that instead of a Save button, you will see a Publish button.

**Q** I use Hotmail to send and receive email messages, but each time I compose a message, the font size is too small for me to read. How can I change the default font to a bigger size, so each time I start a new email, I can read it more easily? I don't want to have to change the font size each time.

**A** Hotmail does not have a default font option; however, you can apply a work-around that will achieve the desired effect. When you create a personal signature that appears at the bottom of each email you compose, you are given font and size options. If you create a signature, you can use that customized font automatically in your emails.

Log in to your Hotmail account and click Options on the upper right and choose More Options. Under Customize Your Mail, choose Personal E-mail Signature. In the text field, type your name. Use the tools to change the font and size to the way you'd like all text to appear in your emails. Click Save.

If rebooting doesn't enable your computer to update correctly, the next step is to disable any antivirus software you have installed. The directions for disabling your antivirus software will differ depending on which program you are running.

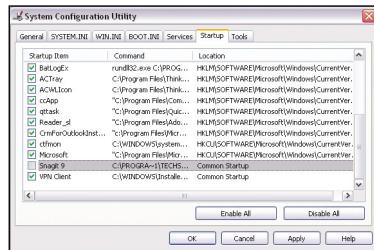
Return to your inbox and create a message by clicking New on the top left. Your newly created signature will automatically appear in the text box. Place your cursor next to the signature text. Begin typing and Hotmail will automatically use the same font size and style you specified for the signature. You can then delete the signature or leave it at the end of the message.

**Q** I created a Microsoft Excel 2007 spreadsheet, and when I print it out, the column letters and row numbers are visible. Is there a way to hide these when printing?

**A** To hide the column letters and row numbers in Excel 2007, simply click Page Layout on the ribbon and locate the Sheet Options section. Uncheck the box next to Print under the Headings option. If you're using Word 2003, go to File and choose Page Setup. Click the Sheet tab and under the Print section, uncheck Row And Column Headings.

**Q** Whenever I turn on my computer, it takes a long time for it to boot up. I was told that part of the problem could be that I have too many programs loading on startup. How can I limit the programs that load when I start my computer?

**A** Even though you may not realize it, many of the programs on your computer could be running in the background, even though you didn't open them. That's because they automatically load when your computer starts, which can sometimes slow down performance. To check



The System Configuration Utility allows you to choose which programs automatically load when you start up your computer.

and manage which programs are loading on startup, go to the Start menu in WinXP and choose Run. Type msconfig in the text field and choose OK. (In Vista and Win7, type msconfig in the Start search box.) When the System Configuration Utility box appears, select the Startup tab.

Many of the items on the Startup list may seem like gibberish, but others will look familiar to you as programs you use on a daily basis. Browse the list of startup items and uncheck the ones you don't need immediately when the computer starts. For example, your instant messaging program might start up automatically even if you're not using it. For more information about disabling startup items, see "Windows XP: Speed Up Your PC" on page 28. ■

## Feature Package Topics

Each Smart Computing issue includes tips, reviews, and information about a variety of topics. However, each issue also has a featured group of articles about a selected topic. Below is a list of the Feature Packages from the previous year. As a Smart Computing subscriber, you have access to all of our archived articles at [www.smartcomputing.com](http://www.smartcomputing.com).

<b>February 2009:</b>	Solve Windows Problems
<b>March 2009:</b>	Clean Out Old Software Clutter
<b>April 2009:</b>	Save Money On Your PC
<b>May 2009:</b>	Restore Windows
<b>June 2009:</b>	Get More Mileage Out Of Your PC
<b>July 2009:</b>	8 PC Emergencies
<b>August 2009:</b>	Stay Safe Online
<b>September 2009:</b>	Master Your Browser
<b>October 2009:</b>	Driver Updates
<b>Fall Issue:</b>	Upgrade Your PC
<b>November 2009:</b>	Windows 7
<b>December 2009:</b>	Holiday Gift Guide

## Home Work

# The HL-5340D & Interpret S405 Help You Get It Done

TARA SIMMONS BANTAM

SEND YOUR COMMENTS TO  
TARA@SMARTCOMPUTING.COM



**HL-5340D**  
\$199.99  
Brother  
(908) 704-1700  
[www.brother.com](http://www.brother.com)



**Interpret S405**  
\$129.99  
Lexmark  
(800) 539-6275  
[www.lexmark.com](http://www.lexmark.com)

The lines between home, office, and home office are often muddy, and if your home is like mine, multiple people working at various tasks means you ask a lot of your home-office electronics. Two printers I put to work recently address two different needs you might encounter in a hectic home: many prints and many tasks.

### HL-5340D

First up, the HL-5340D, a monochrome laser printer from Brother, is a workhorse. Laser printers in general are built for printing a high volume of pages, and the HL-5340D is no exception. Yet, it's relatively small and economical enough that it wasn't out of place in my busy home office and would be ideal for a small business. The HL-5340D was a breeze to set up and configure. In fact, the most difficult part of the process was wrestling the 9.7- x 14.6- x 15.1-inch (HxWxD), 20.9-pound unit free of the box and sturdy packing material.

The HL-5340D output clean and clear text and grayscale image prints quickly and smoothly. Brother reports the printer can spit out up to 32ppm (pages per minute), and that held true in my experience. Duplex printing is a nice paper-saving addition at this price point, and an optional high-yield (8,000 pages) toner cartridge can also help ration resources.

The HL-5340D holds up to 250 legal- or letter-sized sheets of paper in its tray (you can add two more trays, but it will cost you close to the price of a new printer for each tray), and an additional fold-out tray lets you print in a variety of sizes. This paper tray also allows for a feature I really appreciated: a straight-through paper path. By folding down the back panel of the printer, I could send a sheet straight through the printer; it didn't bend or curl. This is a real help for printing on envelopes or a particularly unyielding material.

The impressive print results, speed, and overall quality of the HL-5340D make it a good choice for anyone who prints a lot of invoices or other papers on a day-to-day basis. A \$50 upgrade to the next model in the line, the HL-5370DW, will get you Wi-Fi and Ethernet capabilities.

### Interpret S405

The Lexmark Interpret S405 wears many hats. With scan, copy, fax, and photo-printing capabilities, the Interpret handled just about any task I thought up. Setup took some time, thanks largely to automatically generated updates and the extra steps needed to configure the wireless capabilities, but step-by-step instructions made the process painless.

Text prints were clear and speedy, and photo prints were good. Black-and-white and sepia photo prints were solid, and color prints were strong, though the greens and flesh tones of some shots seemed just a hair off of true-to-life. I could pick up a touch of graininess in the details of some images, but overall, prints were acceptable. (If you're looking for a printer dedicated to outputting photos, check out "Head To Head: Photo Printers" on page 21.)

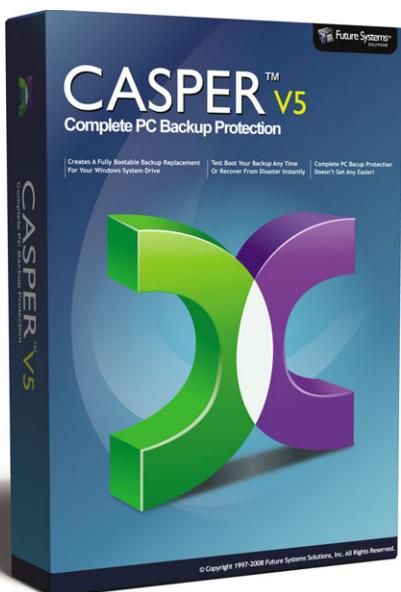
A PictBridge port and built-in media card reader let me print images without a computer. Selections such as which picture to print from a memory card and fax options are chosen via a small LCD and a button panel. It was nice to be able to choose options without a computer, though the positioning of the button panel directly above and behind the output tray was sometimes cumbersome. I was able to tilt it up for a better angle, but pressing buttons pushed it down and out of view again. That quirk aside, the Interpret felt solidly built, and I appreciated its compact design.

Elsewhere, a 35-page capacity document feeder let me make copies of a letter without having to stand watch, and the 8.5- x 14-inch scanner let me scan documents and photos at up to 1,200 x 2,400 dpi (dots per inch). The separation of inks into four cartridges is also a welcome touch. Altogether, the varied abilities and capable handling of tasks will make this printer a welcome addition in many homes (and home offices). ▀

# Casper & Netflix

## Better Backups & Movies On Demand

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I'm not enamored of the software my wife (grudgingly) uses to back up her notebook. It really uses much more storage space on her external USB hard drive than it needs

to. It creates a recoverable image of her entire hard drive, but then it also does a separate backup of her personal files, which is redundant. And because it stores both types of backups in a file format only the software itself can open, I can't connect the drive to our other PCs to offload family photos or new music she's bought.

Enter Casper, the friendly ghosting software. Casper 5 cloned my wife's notebook drive to her backup drive, OS (operating system) and all, without compressing or otherwise changing any files. Not only did this let me access her backed-up files using other computers, but it also meant that if her laptop's drive fails, I could simply replace it with the hard drive inside her external enclosure. (Both drives have to support the same interface, such as SATA.)

Even better, after the first cloning, Casper updated only files that had changed, making long backup sessions a thing of the past. Well, OK, it took Casper half an hour to update her 250GB backup, probably because USB 2.0 is so slow. Still, a half-hour is much more palatable than the initial 5-hour drive cloning.

Future Systems Solutions also let me test-drive a beta of the new Casper 6. Along with advanced support for Windows 7 and SSDs (solid-state drives), this edition let me boot directly from the USB backup drive. Booting Vista from USB is like watching grass grow, but it's nevertheless a much easier way to

bring a dead PC back online than swapping out its hard drive.

### Netflix On The PS3

Of course, the only way I could part my wife from her notebook during all this was to distract her with something shiny. It was a special disc that came in the mail from Netflix.

Last month, I told you about my new Blu-ray Disc player, Sony's PlayStation 3 (\$299.99/120GB, \$349.99/250GB; [www.us.playstation.com](http://www.us.playstation.com)). As I've said before, even if you don't care about playing games—my wife didn't until we tried Little Big Planet—the updatable PS3's network media player and living-room Web access capabilities make it easily worth the price.

Now, Netflix video streaming is available on the PS3, assuming you have fast broadband service and an Unlimited Netflix subscription (\$8.99 and up per month). You could previously stream Netflix movies to your PC, of course, but I personally prefer a larger screen and a comfy couch.

To get started, sign up online for a free BD at [www.netflix.com/ps3](http://www.netflix.com/ps3). When the disc arrives, pop it into your PS3. It will display a URL and a short code of letters and numbers on your TV. On your computer, log in to your Netflix account's main profile, surf to the URL, and then type in the code.

Put any Netflix movie available for Instant Streaming (about 17,000 out of the 100,000 the company offers on DVD) into your main profile's Instant Queue. On your TV, whenever you want to browse or watch the movies in your Instant Queue, simply insert the Netflix BD. The disc is just a token to access the Netflix service; it doesn't contain any movies itself.

As my wife and I found, using Netflix on the PS3 couldn't be easier. You can pause, rewind, and fast forward anything you're watching. Video quality over our 6Mbps DSL connection ranged from superb ("The Producers" in 720p HD) to average for DVD ("Pocoyo," "The IT Crowd"). We occasionally encountered some delays during a Saturday evening movie, but otherwise things have been smooth.

Rumor has it that Netflix is also coming to the Wii, as it already has to the Xbox 360, a few TVs, TiVo HD, various BD players . . . ■



Netflix  
\$8.99 and up per month  
(408) 540-3700  
[www.netflix.com](http://www.netflix.com)

## MSI Wind Top AE2010-31SUS

# Just Begging To Be Touched

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**AE2010-31SUS**  
**Starts at \$649.99**  
**MSI**  
**(626) 913-0828**  
**us.msi.com**

**N**ot so long ago, homes with two computers were considered on the cutting edge. Today, households with networks tying together multiple systems and Wi-Fi-enabled devices are fairly common—my own home included. Still, under my roof, you'll find six people, including three socially active teens, all calling dibs on the one PC or notebook that is available. My family could easily find room for two or three additional systems and still have "I'm next in line" issues. Such scenarios are where a system such as MSI's Wind Top AE2010-31SUS would come in handy.

You're likely familiar with netbooks by now and their scaled-down-notebook size and components aimed primarily at Web-centric and basic office productivity chores. "Nettops" take the same approach with desktop systems. The AE2010-31SUS falls in the latter category, sporting a thin, space-saving, all-in-one design that combines a 20-inch touchscreen monitor and notebook-like components into a single frame you can wall-mount or prop up via a built-in kickstand. As a home's only computer, the AE2010-31SUS wouldn't cut it for hardcore video-editing, gaming, and other graphics- and processor-sapping applications. As a secondary system starting at \$649.99, though, the AE2010-31SUS is ideal.

Above all else, a drop-dead gorgeous exterior and touchscreen abilities define the AE2010-31SUS. A glossy-black bezel with glass trimming surrounding all sides gives the AE2010-31SUS an appearance that's suitable for any room, especially kitchens where the system's thin (15.46 x 20.07 x 2.15 inches [HxWxD]) frame seems a natural fit. Touchscreens aren't for everyone, but the AE2010-31SUS's touchscreen implementation comes in particularly handy for scrolling photos and videos, quickly rearranging open windows, and launching apps from MSI's brilliant Wind Touch interface. Otherwise, getting consistent touchscreen results with the AE2010-31SUS was a bit hit-and-miss. MSI does include two

apps optimized for touchscreen use, however, including MSI Easy Viewer, which provides a wonderfully fluid means of viewing photos. SoftStylus makes use of an included stylus or on-screen touch-enabled keyboard to enter text in email, browser, etc. via handwriting.

The AE2010-31SUS also includes two built-in 3W speakers that use SRS Premium Sound Technology. The speakers output surprisingly good audio with strong volume, clarity, and richness. At the bezel's top, there's an integrated, above-average 1.3MP Web cam and microphone. At the back are four USB ports, one eSATA (external Serial Advanced Technology Attachment) port to add an external hard drive, Ethernet port, VGA in and out ports, and mic and headphone jacks. On the left side panel are two more USB ports, DVD Super Multi ReWriter Drive (dual-layer burning supported), and 4-in-1 card reader. You'll use two USB ports for the bundled, black USB keyboard and mouse, which aren't top-of-the-line but get the job done.

As mentioned, the AE2010-31SUS's components lean toward those of a midrange notebook, but they're nothing to sneeze at. An AMD 1.5GHz Athlon X2 Dual Core 3250e handles processing chores, and onboard ATI Radeon 3200 graphics handle display duties. You also get an internal 320GB SATA drive, 4GB of DDR2 RAM, Wi-Fi (802.11b/g/n), and a 90W external power brick. MSI installed Windows Vista Home Premium in my review model but is now shipping it with Windows 7 Home Premium.

Usage-wise, it took all of about five minutes to unbox, set up, and configure a Wi-Fi connection on the AE2010-31SUS. Other nice touches include the system's fanless approach to cooling, which keeps operation extremely quiet, and the ability to plug other devices into the VGA in port. Online videos from Hulu.com and similar sites played stutter-free. Elsewhere, depending on your stance on pre-loaded software, you'll either love or hate that the AE2010-31SUS comes with plenty of it, including trial versions of Norton Internet Security (60 days) and Office 2007 (25 usages).

Overall, if your needs are fairly demanding and you want to replace your main desktop PC, you'll probably want to look elsewhere. Conversely, as a complementary system with some nice surprises in a beautiful frame, the AE2010-31SUS' wind blows strongly. ■

# Check Your Vehicle's Health

## CarMD Handheld Device

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[www.carmd.com](http://www.carmd.com)

I drive a 1999 Mercury Cougar. Some would consider it a "beater," but I have a pretty good excuse as to why I haven't yet traded in the keys for a brand-new set of wheels. In the midst of planning a wedding, the mutual decision is to purchase a newer, more reliable vehicle after taking the blow of all the wedding expenses. I have approximately eight months to go.

In the meantime, I can't really complain. It's still in decent shape, and it has gotten me from point A to Z and back again with few problems along the way. Brand-new, it was a fierce Cougar, fast and powerful. But that was a decade (and nearly 170,000 miles) ago. These days, it's been acting more like a sick little kitten.

There I was, heading to work one chilly morning when it happened. Like a bright orange glowing demon on my dashboard, it was staring back at me: my Check Engine light. If you've ever had this happen, you know it's pretty hard to ignore—not only because it indicates that something is definitely wrong with your vehicle, but also because it's just so darn nagging and intrusive.

You can imagine my enthusiasm when the opportunity arose to test CarMD, an automotive handheld device that collects data from your vehicle's computer system and then generates a diagnostic report of its status.

Using CarMD is very simple. The tool runs on two (included) AAA batteries. To connect CarMD, you'll need to find your vehicle's DLC (Data Link Connector). This is a 16-pin connection that is universal on all 1996 and newer vehicles (manufactured for distribution in the United States) that are equipped with second-generation OBD (On-Board Diagnostics) technology (check your car's manual to make sure). The DLC is usually located under the driver's side dashboard, but the CarMD users manual gives you several other possible locations to check (mine took about 10 seconds to find and

was in the first spot that CarMD recommends you look). Once you connect CarMD, turn the car's ignition to On (do not start the engine). CarMD will beep twice when a good connection is made. Once it retrieves the data it needs, it will beep four times. You can now disconnect CarMD.

Three indicator lights on the device report the status of the data collected. Green means OK, yellow means Possible Problem, and red means Service Required. If there is a problem, CarMD will display trouble codes on its LCD; if there is more than one code, a scroll button lets you view all the results.

As expected, my car's report generated a red light. It also produced four codes that left me scratching my head. So, I installed the included software onto my PC. Using the included USB cable, I connected CarMD to my computer and was prompted to create an account at CarMD.com. After choosing a username and password, I entered my car's VIN and mileage. Within seconds, CarMD provided my car's stats and deciphered the codes for me. My vehicle's Health Report broke down each code by definition and possible causes. Based on all the information, it gave me the most likely fix, including estimated costs.

CarMD has other benefits aside from decoding a Check Engine light. For example, it could be a big help when shopping for a used car, letting you examine a vehicle before you purchase it to ensure you won't drive away with a lemon. It can also help you keep up-to-date on your car's maintenance and help you prepare for long trips. In addition, you can find out if your vehicle will pass an emissions test, so you know whether your car is polluting the environment. And, once you create a Web-based account, CarMD even provides information about safety recalls and technical service bulletins if any are issued for your vehicle's make and model.

So, according to the summary report, what's my damage? Well, if CarMD's suggested fix—which involves replacing the fuel injector—solves the problem, then I'll be forking out about \$250 in parts and labor. That's doable.

However, if my Cougar ends up needing a little more TLC, then maybe I'll be getting that new car before I say "I do." ■

# Head-To-Head: Photo Printers

## Print Your Pics At Home

**W**ith the proliferation of online and local photomats that make it easy to print your digital photos, buying a photo printer isn't the no-brainer it used to be. It's not always about the lowest cost per print anymore, it's about convenience, control, and creativity. Today's printers have to stand out in at least one regard to be worthy of your hard-earned cash, and we looked at six models that all accomplish that in one way or another. Note that all print times reflect how long it takes to print at maximum quality settings.

### Canon Pixma iP100

Many portable photo printers can only print 4-x 6-inch photos, and some can print 5-x 7-inch photos, but the Pixma iP100 is one of the few that can go all the way to 8 x 10 inches for pictures and letter size for standard paper. Although it doesn't have a handle, the thin 2.4-inch profile of the iP100 makes it easy to throw into a bag or briefcase. And once you arrive at your destination, its ability to print on letter size paper means you can print maps, itineraries, and pretty much anything else you need in addition to photos.

In our tests, 4-x 6-inch prints completed in about a minute and a half, while 8-x 10-inch pictures took nearly three minutes. All prints were very crisp with accurate, rich color and no blemishes. The only downside to the iP100 is its lack of integrated screen,

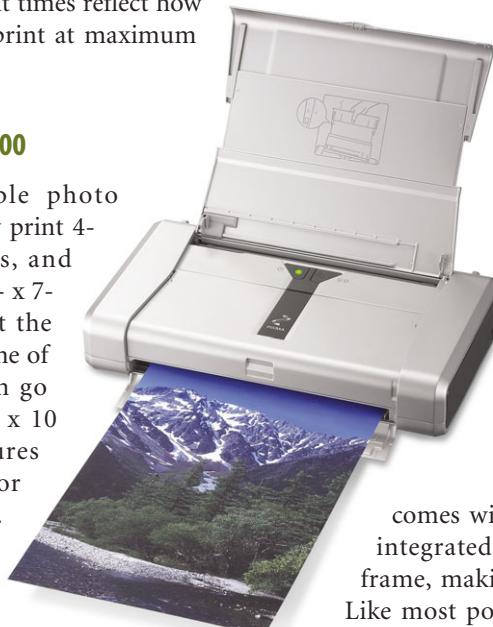
something for which this portable and useful printer simply screams. If you're looking for a printer that works just as well at home as it does on the road, and would find its accommodating paper handling abilities useful, the iP100 fills a unique niche.

### Canon Selphy ES40

The portable Selphy ES40 uses all-in-one cartridges that contain both paper and ink. You choose the type of paper you want to use (everything from postcards to paper with preprinted Christmas card borders is available), insert it into the printer, and print until the paper runs out.

The Selphy ES40 comes with a handle that's integrated directly into the frame, making it very sturdy. Like most portable printers, it lets you insert a memory card and print directly without having to use a PC, and the interface for doing this is a dream. It works much like that of Canon's digital cameras, using a dial you can click to browse through pictures or menu entries one-by-one or spin to quickly get to the picture or entry you need. Navigating pictures and the interface menus is zippy, and that's a good thing considering the myriad editing and effects options available.

When you're ready to print, the ES40 sounds and acts like something out of Willy Wonka's chocolate factory.



Canon Pixma iP100



Canon Selphy ES40

Paper is projected sideways out of the front of the device before it automatically spins in place 90 degrees to re-enter the printer lengthwise. It then runs back and forth through the printer four separate times to lay down each layer of color. This takes about a minute and a half per print, and the results aren't perfect but are acceptable for snapshots. Colors are a bit muted, but images are sharp, and it's nice to know exactly when your ink and paper will run out. If you prefer the standard model of buying ink and paper separately and want more flexibility in the sizes of paper you can print, the ES40 isn't a good fit, but as a go-to machine on the road, it works well.

### Epson PictureMate Charm PM 225

What could be mistaken for a cute little six-pack cooler is really a fairly capable portable photo printer that can churn out 4-x 6-inch or even 5-x 7-inch pictures no matter where you are. You can carry it around using the integrated swiveling handle, and a lid with a viewport keeps the controls and screen safe from dust and scratches when you're on the go.

Memory card slots are on the front if you want to print directly from a camera, and selecting and editing photos is done using traditional button controls while previewing images on a relatively tiny flip-up screen. When printing directly from a memory card instead of a PC, editing options are

## BUYING TIPS

- **Check the cables.** Many printers require a USB cable but don't come with one. Be sure to pick one up, and be sure to get one that has the proper ends for your printer (this varies, so check the box).
- **Save with packs.** Many manufacturers bundle ink cartridges and paper together in kit form and sell them as a kit at a significant discount compared to buying everything separately. Look for these bargains to save big bucks.
- **Get good paper.** We ran non-premium photo paper through all of the printers in this roundup just to see what would happen, and the results were predictable: muddy colors, no gloss, and blotchy details. Don't pinch pennies on paper—spring for the good stuff.

minimal. There are a few auto-enhancers for basic color correction and the like, you can add a date to a photo, and you can change a picture to either black and white or sepia. It's also possible to print borderless or bordered prints or to print two on a sheet at wallet size or eight on a sheet at mini-wallet size. It takes about a minute to print each sheet, and quality is excel-

larger than 8 x 10 inches, but 8 x 10 is the maximum paper size most printers accept. The solution is a printer such as the Stylus Photo R1900, which prints at widths up to 13 inches and works brilliantly with commonly available 13- x 19-inch photo paper.

Setup is straightforward, and the printer uses seven pigment-based ink tanks plus a Gloss Optimizer cartridge that does precisely what its name implies. Prints are stunning, especially if you are working with images with high enough resolution to print clearly at 13 x 19 inches. Colors are vivid and even, blending perfectly with no banding, faded spots, or other anomalies. The Gloss Optimizer tank runs out relatively quickly compared to the others, especially when making 13- x 19-inch prints, but replacement four-packs are inexpensive, so it isn't a real problem.

A few of our prints turned out striped in some areas, so you could see extremely faint lines between each pass taken by the print head. We couldn't pin down the source because it appeared randomly, sometimes at the bottom of images but not at the top, sometimes in one area, and most of the time not at all.

Minor problems aside, for a consumer-level printer that goes larger than 8 x 10 inches, the Stylus Photo R1900 is a perfect fit for D-SLR aficionados.

**Epson PictureMate Charm PM225**



lent. Colors look great, and details stay nice and crisp.

It would be nice if the printer came with a battery instead of that being a \$49.99 option, but at least that option exists, and overall, this is a capable printer that is easy to tote around.

### Epson Stylus Photo R1900

D-SLRs (digital single-lens reflex) cameras are increasing in capability even as they fall in price. The images they create print clearly even at sizes



**Epson Stylus Photo R1900**

the size of a rectangular Kleenex box and is dominated by a touch-screen display. Special effects available directly from the printer are previewed on the pictures, making it easy to choose which ones you want to apply, but the thumbnail images take a long time to generate. Other than that, using the touchscreen to navigate through photos and menu entries is a breeze. It is especially easy to print multiple pictures by tapping on them as you navigate, and any edits you make can be saved directly to the memory card. Bluetooth support is also built in, meaning you can print wirelessly from compatible cell phones, PDAs, and other devices.

The A646 outputs 4- x 6-inch or 5- x 7-inch images, with the former taking about a minute and the latter

### HP Photosmart A646

The HP Photosmart A646 is a portable printer about

**HP Photosmart A646**





taking about two minutes to print. It can also print 4- x 8-inch photo cards and 4- x 12-inch panoramas. Detail is good, but colors are a bit oversaturated. This isn't a big deal when printing snapshots, and considering how easy this printer is to use, it's still a great choice if you're looking for something portable.

### Kodak ESP5250

In the past, a jack-of-all-trades printer such as the ESP5250 printed photos as an afterthought, but those days are gone. This printer is competent at everything it does, including copying, scanning, and printing both pictures and documents. Better still, it can handle paper at sizes ranging from 4 x 6 inches to letter size.

You can hook the printer up to your PC using a USB cable, but it

also has integrated Wi-Fi capability so we tested it using that. The Wi-Fi connects the printer to your wireless router so that any device connected to your home network can use it without having to be physically connected to the printer, making it very easy to place the printer wherever you wish. You can also make copies directly from the printer or use the integrated memory card reader and LCD to print photos without using a computer.

In our tests, 4- x 6-inch prints took about 45 seconds (sometimes much longer), while 8- x 10-inch prints took between four and a half and five minutes. All the pictures we printed were nice and clear, with colors not quite as rich as we'd hoped yet still very good. This is a capable all-in-one printer as long as you don't need a fax machine, and the wireless support is a convenient touch.

### A Printer for Every Occasion

Choosing a photo printer isn't as simple as comparing print quality anymore. You really need to determine how you want to use the machine to make a decision. If all you care about is snapshots and portability, the Selphy ES40, PictureMate Charm PM 225, and Photosmart A646 are all sensible choices. If you want more flexibility in your portable printer, something such as the Pixma iP100 is an excellent choice. If you want the best possible printer to share on a home network, an all-in-one such as the ESP5250 fills the bill, and if you have a terrific digital camera, something such as the Stylus Photo R1900 will really show off your pictures. The only thing that all photo printers have in common these days is that they really are fun, versatile tools that allow you freedom that the online printing services can't match. ■

BY TRACY BAKER

### SYSTEMS SUPPORTED

Canon Pixma iP100	
Canon Selphy ES40	
Epson PictureMate Charm PM 225	
Epson Stylus Photo R1900	
HP Photosmart A646	
Kodak ESP5250	

### PRODUCT INFORMATION

Name	Price	Company	Contact Info	URL	Notable Features
Pixma iP100	\$249.99	Canon	(800) 385-2155	<a href="http://www.usa.canon.com">www.usa.canon.com</a>	Thin, portable, prints up to letter size
Selphy ES40	\$149.99	Canon	(800) 385-2155	<a href="http://www.usa.canon.com">www.usa.canon.com</a>	Slick controls, sturdy, unique ink/paper combo cartridges, voice guidance
PictureMate	\$149.99	Epson	(800) 873-7766	<a href="http://www.epson.com">www.epson.com</a>	Lid closes to protect screen, portable Charm PM 225
Stylus Photo R1900	\$549.99	Epson	(800) 873-7766	<a href="http://www.epson.com">www.epson.com</a>	Stunning output on photo paper up to 13 inches wide, multiple ink tanks mean you only need to replace what's low
Photosmart A646	\$149.99	HP	(888) 999-4747	<a href="http://www.hp.com">www.hp.com</a>	Touchscreen controls, Bluetooth support, portable, prints up to 5- x 7-inch or 4- x 12-inch photos
ESP5250	\$159.99	Kodak	(888) 368-6600	<a href="http://www.kodak.com">www.kodak.com</a>	Scans, copies, connects wirelessly, relatively inexpensive ink

# Comprehensive Bookkeeping QuickBooks Pro 2010

\$199.95 | Intuit  
(877) 683-3280 | [www.intuit.com](http://www.intuit.com)



With the release of QuickBooks 2010, Intuit has enhanced some features and added others, making it a great upgrade for current users. Its feature set and tight integration with Quicken and TurboTax should also engage new users who run or are starting a small business, nonprofit, or even a club where finance tracking is important.

## Bits & Pieces

QuickBooks comes in numerous variants, from Simple Start (basic invoicing) to enterprise solutions for larger companies. We reviewed QuickBooks Pro, which will suit the needs of most small and start-up business users. With Pro, you can purchase one to three licenses (\$199.95 to \$549.95); set up network access to files; create estimates, invoices, and forms; track sales; project time, expenses, mileage, and other important metrics; and generate more than 100 different reports. Unless you need to generate a business plan, forecast sales and expenses, or use one of QuickBooks' six customized versions, you should have everything you need with Pro.

## What's New

With the release of 2010, Intuit has incorporated a document management feature that harried business owners will love. Store online, through QuickBooks, any scanned or electronic business document (100MB free). You can associate the documents with any aspect of your finances, from vendors to transactions. Documents

**Key Feature:** This function-laden small-business accounting software integrates beautifully with other popular consumer products from Intuit, including Quicken and TurboTax.

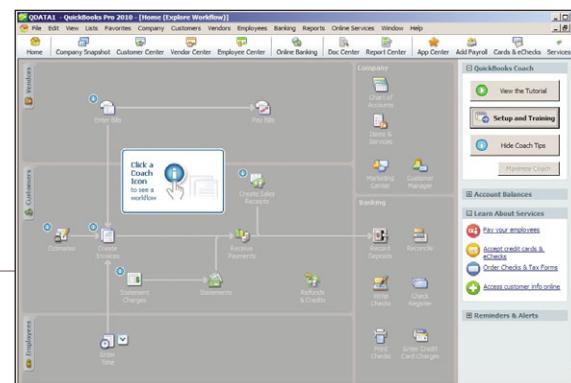
are backed up, and you can share them with others via the Internet.

Intuit has also enhanced QuickBooks' reporting features, with such additions as favorites tagging so you can quickly obtain the reports you use most. Other enhancements, including batch entry and edit and invoice customization, minimize outlay on traditional cost centers such as data entry and marketing.

## Robust Interface & Handy Helpers

Like its little brother Quicken, QuickBooks offers an expansive interface with lots of options that go beyond basic accounting. Some of these you set up during the 30-or-so-minute installation and setup by offering insight into your company's needs and attributes. The interview helps QuickBooks tailor your interface, asking questions such as whether you want to track time or generate estimates.

Upon opening QuickBooks, you'll see three learning-related interfaces: Learning Center (links to tutorials and wizards), Live Community (post questions to Intuit users), and QuickBooks Coach (view a tutorial, pay for coaching, or get pop-up tips), which appears as both a pop-up and a



sidebar. All this seems a bit frenzied at first, but it's worth your time to absorb some of this information.

## Beyond The Basics

Past the coaching assistance are many menu and button options, with most data pools organized into logical "centers," such as Vendor Center, Employee Center, Customer Center, etc. Click any of these to dive into that particular category or click Company Snapshot at any time for an overview.

Some functions are very intuitive, but others could be better orchestrated. For example, setting up a bank account takes several steps, and deleting an unneeded account we imported (accidentally, on purpose) was confusing. Issues like these—and a daunting number of menu options—are what make the tutorials important.

Once you learn the program, you'll find its breadth rewarding. One downside is that the program tries to sell you its auxiliary services, including deposit scanning, and payroll, at every turn. ■

BY JENNIFER FARWELL

# Get The Basics Free Pinnacle VideoSpin 2

To get users engaged with its products and potentially pay for the higher-end Pinnacle Studio (we assume), Pinnacle Systems created this free video editor. Video enthusiasts will tire of its basic approach quickly, and getting the codecs (compression/decompression engines) for cell phones, iPods, MP3 players, and other advanced file formats will cost you \$14.99. (By default, VideoSpin can create movies for the PC or television playback, and it gives you the other codecs for 15 days, gratis). Nevertheless, Video Spin is a nifty little program for fledgling video editors (including kids) just starting out.

The download is huge (162MB), but installation is painless. The inter-

**Key Features:** Pinnacle VideoSpin 2 is a user-friendly and easy-to-use (albeit basic) video-editing utility that automates uploading of your videos in Flash format to YouTube.

face is straightforward with only two tabbed options—Edit and Make Movie. File options let you start a new project; import video; add sound, effects, and transitions; etc. At the bottom of the interface is a timeline like those in other editing programs but without the whiz-bang extras that stymie novice users. A handful of buttons and drop-down menus let you access video, photos, audio, etc.; adjust display size and quality, upload

Free | Avid Technology  
(866) 446-0833 | [www.videospin.com](http://www.videospin.com)



your file to the Web, and more. The big Start Tutorial button (on the Edit interface) will either get you going or inspire you to purchase a more advanced product. ■

BY JENNIFER FARWELL

# Speed Up Downloads Free Download Manager

Free Download Manager is what its title implies—a free program that manages downloads from an array of file server sites. You can schedule and prioritize downloads, split files for faster downloading, decide how much of your Internet connection to allot, perform batch downloads, and more. It can sort downloads by type, status, and date, as well. It also includes an Upload Manager for transferring video, photos, and other files to compatible sites.

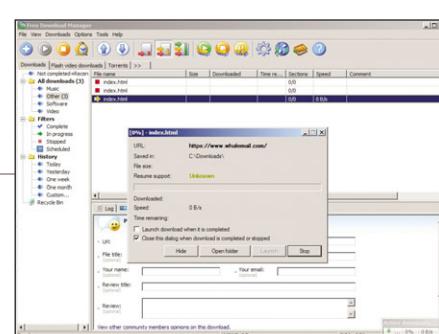
All these features make for a fairly complex interface, so the program is not for the first-time downloader. Rather, it is a great tool for those wanting a more feature-rich download engine without added expense. Free Download Manager is open source,

**Key Features:** Free Download Manager accelerates download speeds by sectioning files and downloading the parts simultaneously, plus many more download customizations.

which means it does not have a corporate developer and there is no live or phone technical support. However, the site offers Internet-based forms for technical questions and contact requests as well as a user forum and other helpful information.

The program is a solid little utility, so we feel comfortable recommending it. During installation, you can opt to join a download-ranking community (a good idea; it enables checking downloads against the community's malware database), install an update

Free | Freedownloadmanager.org  
Contact via online email form | [www.freedownloadmanager.org](http://www.freedownloadmanager.org)



manager program (not needed and may conflict with anti-malware software), and enable BitTorrent support. BitTorrent is a peer-to-peer file sharing protocol used mainly for large downloads; you may never need it. ■

BY JENNIFER FARWELL

COMPILED BY JOSEPH MORAN

## Windows News

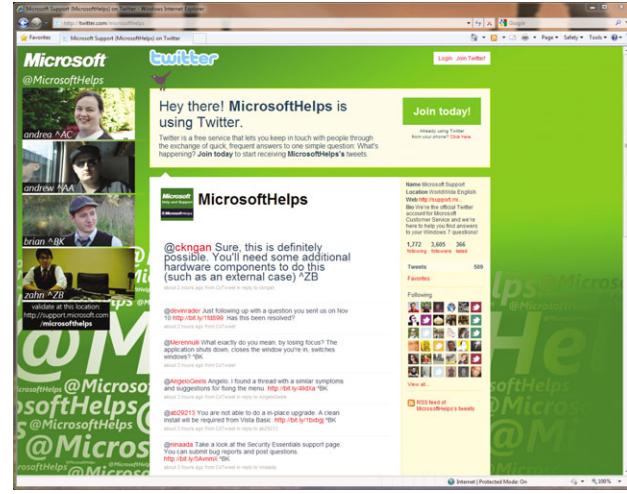
### Free Windows 7 Support Available Via Twitter

Windows 7 users have a new way to obtain technical support—via Twitter. The @MicrosoftHelps Twitter name is dubbed “the official Twitter account for Microsoft Customer Service.” Users with Win7 questions can tweet them to that address (or visit [twitter.com/MicrosoftHelps](http://twitter.com/MicrosoftHelps)) and receive responses from a group of Microsoft support reps.

Of course, due to Twitter’s 140-character limit, questions and answers must be kept short, though, the latter typically include Web links to more detailed information. For now, Microsoft’s Twitter account only supports Win7, but there are plans to expand it to other products in the future.

### Microsoft Selling Windows PCs Sans Trialware

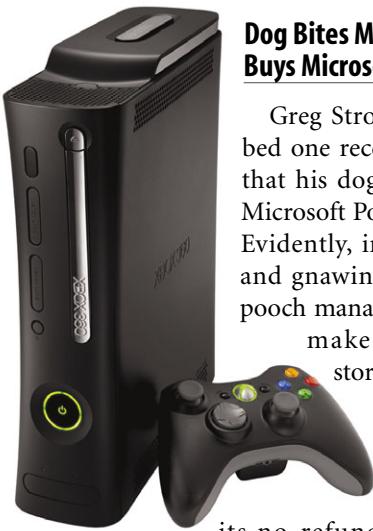
When you fire up a newly purchased PC, it’s common to find it loaded with unnecessary third-party programs that clutter up menus and can even slow down a system’s responsiveness. The stuff is known by many names—trialware, shovelware, bloatware—but whatever you call it, you won’t find it on computers sold at Microsoft’s own online or retail stores.



Windows 7 users with technical questions can now tweet them to @MicrosoftHelps and reach Microsoft support reps.

In lieu of third-party add-ons, Microsoft’s “Signature PCs” instead come with an arguably more useful set of preinstalled programs, including Windows Live Essentials, Microsoft Security Essentials antivirus/malware protection, Adobe Acrobat Reader, and Silverlight and Flash plug-ins for Internet Explorer.

## Microsoft News



### Dog Bites Man's Xbox Controller, Buys Microsoft Points

Greg Strope of Richmond, Va., went to bed one recent evening and awoke to find that his dog, Oscar, had purchased 5,000 Microsoft Points via his Xbox Live account. Evidently, in the process of playing with and gnawing on the Xbox controller, the pooch managed to turn on the console and make the \$62.50 purchase using stored credit card information.

Although Strope didn’t request his money back, after his story made the news, Microsoft made an exception to its no-refund policy. The company gave Strope a full refund, issued some free Microsoft Points, and gave Oscar his own Xbox Live Gamertag.

### MSN Direct To Go Dark

Apocalyptic movie notwithstanding, 2012 is probably not going to be the end of the world. It will, however, mark the end of MSN Direct. Microsoft says the MSN Direct service, which delivers real-time news, weather, traffic reports, and gas prices over unused FM radio frequencies to compatible devices—mainly standalone GPS (global positioning system) navigation units and a handful of car stereos—will no longer be available after Jan. 1, 2012.

MSN Direct-compatible devices will work normally through the shutoff date, and annual subscriptions will continue to be offered until December 2010. After Jan. 1, 2010, the devices can still be used, albeit without the service’s real-time data features. Customers can get more details, including information about refund eligibility, by visiting [www.msndirect.com](http://www.msndirect.com).

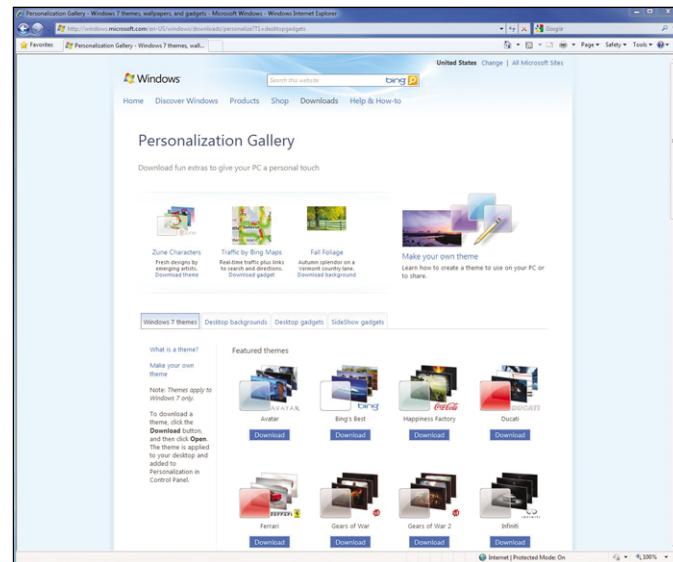


# Windows Tips

## Change Your Desktop Scenery (Windows 7)

If you're tired of staring at Windows 7's bright blue Desktop background—or the handful of included Desktop themes—there are plenty more free themes available. To find other theme options, right-click the Desktop, choose Personalize, and then click Get more themes online or point your browser directly to [tinyurl.com/y18o33s](http://tinyurl.com/y18o33s).

At the site, you'll find dozens of free Win7 themes, including 20 International themes with country-specific scenery and a number of branded themes based on products such as video games, movies, and cars. To install and immediately activate a theme, click its Download button and open (or Save and then open) the .Themepack file.



You'll find dozens of free themes for download at Microsoft's Personalization Gallery Web site.

## Take A Shortcut To Windows Account Settings (Windows Vista, Win7)

If you want to change your Windows user account settings in Vista or Win7, you don't need to go all the way to the Control Panel's User Accounts utility to do it. Instead, you can bring up the same window by clicking the Start button and then clicking your account picture at the top of the Start menu.

From here, you'll be able to change your account name, type, picture, or password and modify settings for other user accounts. (NOTE: Clicking the account picture in Windows XP will let you change the picture but not the other account settings.)

## Open Older Help Files (Vista, Win7)

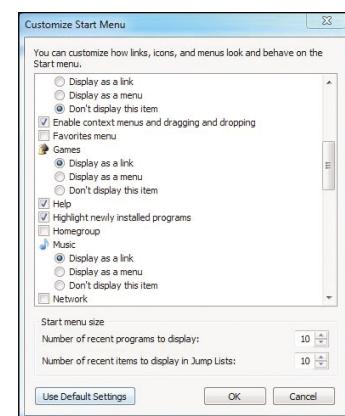
Although most WinXP-era programs run just fine in Vista or Win7, some include help files in an outdated format (with an .HLP file extension) that the newer Windows versions can't open. The problem is that Vista and Win7 lack the Windows Help program (WinHlp32.exe) necessary to read the older Help files, but the good news is that you can add it yourself.

To download WinHlp32.exe, visit [support.microsoft.com/kb/917607](http://support.microsoft.com/kb/917607) and click the link for your version of Windows. Note that there are separate versions of the file for Vista and Win7. After you install the appropriate update (you'll need to validate your copy of Windows to get it), your older Help files should open without a hitch.

## Turn Off Start Menu Highlighting For New Programs (WinXP, Vista, Win7)

When you install new programs in Windows, their entries in the Start menu are automatically highlighted to help you find them for the first time. But if you typically access programs another way, say, via shortcuts on the Desktop or the Quick Launch toolbar, those Start menu entries can remain highlighted indefinitely, which you might find confusing or distracting.

To disable this feature, right-click the Start button, choose Properties, and then click the Customize button on the Start Menu tab. In Vista/Win7, scroll down the list and remove the check mark next to Highlight Newly Installed Programs. In WinXP, click the Advanced tab to find the same setting.



In the Customize Start Menu window, you can turn off the highlighting of newly installed programs.



## Windows XP Get Started Faster

**R**emember how quickly your Windows XP PC booted when you first got it? As you installed applications onto the computer, the OS (operating system) became bogged down with the slew of programs and background processes that ran at startup. With applications that are rarely used or no longer used, you'd be best served by removing them from the startup list (the application remains on your PC) to save yourself some time. In this article, we'll show you how to identify and safely disable the programs and services that are slowing your PC to a crawl.

### Identify Performance Drags

Windows XP includes the System Configuration Utility, which can disable programs that load at bootup. Click the Start menu, choose Run, type **msconfig**, and click OK. Select the Startup tab and examine the Startup Item and Command fields to help you determine which programs currently load at startup. Note that you may need to click the vertical bar on the right side of the Command field to see the complete folder path. Based on the folder location, you might be able to figure out if it's necessary for the program to run at startup.

For example, if you have installed Adobe Reader 9, you may see **AdobeARM** (listed as **C:\PROGRAM FILES\COMMON FILES\ADOBE\ARM\1.0\AdobeARM.exe** in the Command field) and **Reader\_sl** (listed as **C:\PROGRAM FILES\ADOBE READER 9.0\READER\Reader\_sl.exe** in the Command field) under Startup Item. And although it's likely you've determined the two processes apply to Adobe products, a little more research into the products whose names aren't apparent can be helpful.

One option is Microsoft's Windows Defender tool, which you can download from [tinyurl.com/5q36co](http://tinyurl.com/5q36co). Unlike the

folder listings in the System Configuration Utility, Windows Defender offers a Software Explorer tool that gives you vendor details and clearer program titles and tells you whether the program is currently permitted to run at bootup. To open Software Explorer in Windows Defender, click the Tools button and select Software Explorer. From the Category drop-down menu, select Startup Programs and scroll through the various programs.

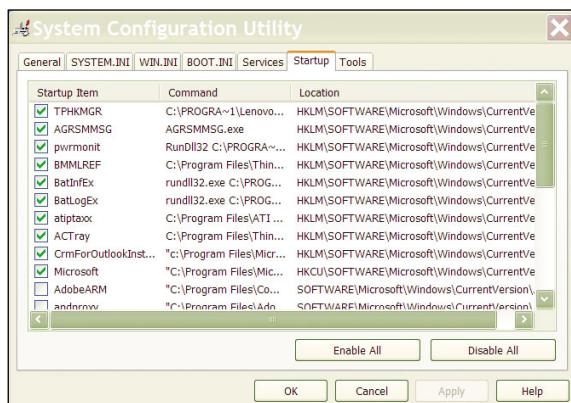
If the information in Software Explorer isn't enough, you can go online to research the names of programs and services that you are unsure about. One resource is [Sysinfo.org](http://www.sysinfo.org) ([www.sysinfo.org](http://www.sysinfo.org)), which allows you to type the Startup Item title from the System Configuration Utility and read a detailed description of what the service provides. For example, Sysinfo.org told us that **Reader\_sl** "Speeds up the time it takes to load the Adobe Reader PDF document reader" as well as that it's "Not required for Adobe Reader to function properly."

Another popular Web site is [SystemLookup](http://www.systemlookup.com) ([www.systemlookup.com](http://www.systemlookup.com)). You can enter the name from the Startup Item section, such as **AdobeARM**, and SystemLookup will tell you what the file does. For instance, it told us that **AdobeARM** is "related to Adobe Optimize and enables Adobe Flash Player 10 and Adobe AIR for ARM Powered devices, ranging from mobile phones to set-top boxes, mobile Internet devices, televisions, automotive platforms, personal media players, and other mobile computing devices."

If you regularly use software from the listed manufacturer or application, you might want to keep the item in the startup list to benefit from tasks it performs. If you don't consistently use the program, you can disable the utilities to shorten startup time.

### Disabling Startup Items

A quick glance over the startup list in the System Configuration Utility shows you that many programs, such as media player, security, printer, and audio software, place



From the System Configuration Utility, you have complete control over which programs run at bootup.

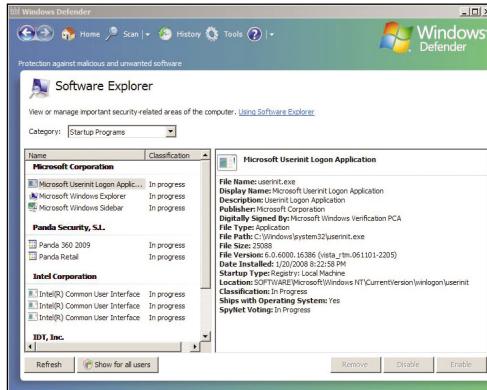
items in this list to run when Windows starts—without ever having asked your permission. If you want to disable items from running at startup, deselect the checkboxes for each of the programs you feel are no longer needed. Keep in mind that disabling the program at startup will not delete the application, only prevent it from running when Windows boots up. That being said, disabling some of the utilities may block access features of your PC. For example, when you install Microsoft Office on WinXP, Microsoft runs Ctfmon.exe, which is a program that provides tools for speech recognition, handwriting recognition, and other alternative text input methods. Microsoft does not let you manually start the alternative user input service.

When you're done selecting the applications you want to disable, click Apply and Close. Windows will indicate that your computer must restart for the changes to take effect. Save and exit any of the applications you have open and click the Restart button. When Windows restarts, you'll see a message that indicates changes have been made to the way Windows starts, and it provides directions for how you can change it back to the default configuration.

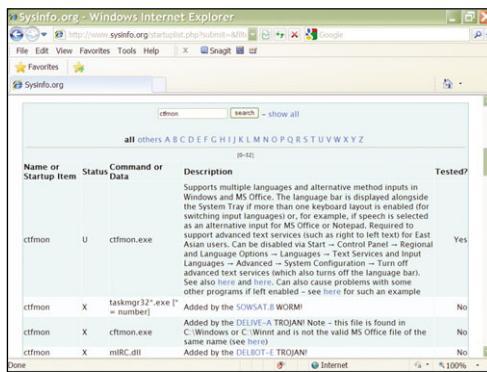
If you prefer, you can also use the Software Explorer utility in Windows Defender to block an application from running at startup. From the Software Explorer window, click the Show For All Users button. Select the application and click either the Remove or Disable button. If you select Remove, you'll no longer see the program in Software Explorer's list, so you won't be able to enable the application if you feel you need it later. Because of this, we suggest you click the Disable option when you want to block a program at bootup.

### Duplicate Titles?

Hackers and virus creators often design their malware so that the title of a virus Startup



**The Software Explorer utility of Windows Defender also gives you a way to control which programs start right away.**



**Confused by the title of a Startup Item? Visit Sysinfo.org and enter the title into the Search field.**

Item is identical to the title of a legitimate Startup Item, such as Ctfmon.exe. Fortunately, you can reference the folder location listed in the System Configuration Utility against Web site services such as Sysinfo.org and SystemLookup, which indicate where the file should be stored. Trend Micro also makes a free program titled HijackThis (free.antivirus.com/hijackthis) that you can download to generate a list of programs currently running on your PC, with the folder location, to a text file in Notepad. Simply print off the list from Notepad, and you can have the list at hand when you type the file name into the Sysinfo.org or SystemLookup databases. In particular, take note of files in the Windows folder that appear in another location, such as Program Files.

### Bring It Back

If you want to re-enable a program in the startup process, open the System Configuration Utility

and place a check mark in the box next to the Startup Item name. Once you reboot the PC, the application will run at startup. ■

BY NATHAN LAKE

## The Services Tab

Generally, it's safe to block items in the Startup tab of the System Configuration Utility. But sometimes, the startup process is hiding in the Services tab. When working in the Services tab, you'll need to be careful, because most of the services are necessary for Windows to run. To be safe, it's a good idea to select the Hide All Microsoft Services checkbox so

you won't disable any important Windows services. Based on the Service and Manufacturer fields, you may be able to determine if the software is necessary to run at bootup. For example, if you've installed iTunes, you may opt to disable the Bonjour Service, Apple Mobile Device, and iPod Service items.

Besides the Microsoft entries, it'd also be a

good idea to keep any items that relate to your PC's manufacturer, as well as any tasks related to your network connection, audio, antivirus, input devices, and peripherals. In fact, we'd recommend only disabling services that you know have no correlation to the hardware on your PC, such as Google Update Service or Java Quick Starter. ■

## Windows Vista Install Service Pack 2

Even though Windows 7 gets all the attention these days, many people are still using Windows Vista. What's more, many people intend to keep using what they have for as long as they can. So what has Microsoft done for Vista users lately? Never fear: Vista SP2 (Service Pack 2) was released last spring. You may not have seen a slick ad campaign (there wasn't one), but SP2 is nonetheless an important step in extending the life of your Vista OS (operating system).

### What's In SP2?

Don't expect to see dramatic differences in Vista between SP1 and SP2. It's a service pack and not a new OS, after all. If you want a whole new experience, Win7 is your answer. But if you're comfortable with Vista and prefer to spend your time and money in ways other than upgrading Windows, SP2 will keep Vista running longer. First and foremost, the service pack rolls out all the previous security patches and updates to Vista, fixing all the bugs and loopholes addressed in Windows to date. That incremental improvement is worthwhile, even if it provides nothing more than ongoing maintenance. SP2 also offers a few minor enhancements, though. The main ones are improved search (integrating Windows Search 4.0 into the OS), faster performance of RSS (Really Simple Syndication) viewers in the Windows Sidebar, and more reliable Wi-Fi connections

when waking after Sleep mode. SP2 introduces a few new hardware compatibilities, as well, most notably Bluetooth 2.1 and support for writing to BD (Blu-ray Disc). Vista SP2 also expands the Windows Connect Now utility, which can transfer wireless network settings directly between machines using a portable USB drive.

### How Do I Get SP2?

Before you begin downloading, take a minute to make sure your system is ready for SP2. First, make sure SP1 is already installed and SP2 isn't. From the Start menu, right-click Computer and select Properties. In the Windows Edition section, look at the line underneath the Copyright. If you already have SP2, congratulations! Windows' Automatic Updates (or someone else using the machine) was so successful that you were completely uninterrupted by the update. If you don't have either Service Pack 1 or 2, you'll have to download and install SP1 via Windows Update (click Start, All Programs, and Windows Update) before proceeding. If your System Properties dialog box shows Service Pack 1, however, you're ready to move on.

Start by backing up your system. Make sure you have copies of all your important personal files, cherished digital photos and videos, and anything else you wouldn't want to lose or re-create if something went wrong. Then, make yourself available for an hour or so. You won't have to mind the machine the entire time, but there may be a couple reboots, and it's always best to keep an eye on things. If you're working on a notebook computer, plug into an outlet; service pack updates are no job for batteries. Finally, close all your open files and applications and disable any antivirus or other security software so that they



**Before doing anything, check your current service pack status from the System Properties dialog box.**



**Service Pack 2 promises better performance of RSS-based feeds displayed on Windows Vista's Sidebar.**

don't interfere with updates to the OS. Just remember to re-enable it after the installation is completed.

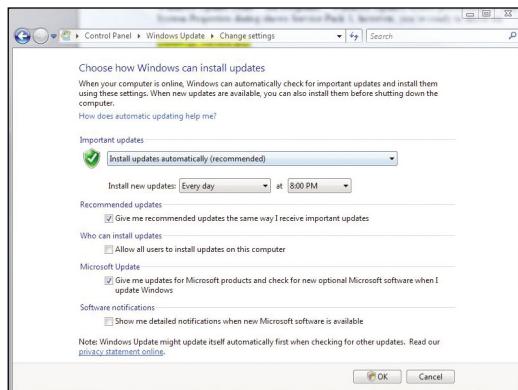
## Automatic Updates

The easiest and quickest way to acquire SP2 is via Automatic Updates. In fact, if your machine is configured for automatic updating (which it should be, for several reasons), you may already have SP2 downloaded but not yet installed. Installation requires an administrator account, so if your normal computing is done with a non-admin account (which it also should be), you may have the download sitting on your computer and waiting for an admin. In any case, start by making sure Automatic Updates are enabled. From the Start menu, click All Programs and select Windows Update. In the left panel, click Change Settings. Under Important Updates, choose Install Updates Automatically (Recommended) from the drop-down menu and select a time when your computer is normally running but you're not doing heavy work. You can also opt to Allow All Users To Install Updates On This Computer, avoiding the need for an admin to log in and install downloaded updates.

After configuring Automatic Updates, you can simply allow Windows to download and install SP2 during your next scheduled update. You can also run the update before that time by clicking the Check For Updates link on the left pane of the Windows Update dialog box. Whether SP2 was previously downloaded and awaiting installation, or becomes available via Windows Update, the installation process is the same: Click the Install Updates button and click through the setup wizard. You can log off and back on as an admin user or simply provide the admin user password when prompted. After the installation completes, following several reboots, check System Properties again to make sure that Windows recognizes SP2 correctly.

## Standalone Download Package

Microsoft also made SP2 available as a standalone download for those who can't rely on Automatic Updates—if your ISP (Internet service provider) requires you to manually connect before going online, for example. Check your free hard drive space first. Depending on the version and method, you may need up to 5GB of free space for the download and installation. The quickest way to acquire the standalone package is to visit Microsoft Support at support.microsoft.com/kb/935791. This Knowledge Base



**Enabling Automatic Updates is the surest and simplest way to acquire SP2 and any other Windows Updates.**

article contains detailed instructions about downloading and installing SP2, including direct links to each version of the installer under the Methods To Download The Latest Service Pack heading. Unless you're also running Windows Server 2008, click one of the first two links for Windows Vista—either 32-bit or 64-bit, depending on your system configuration. After clicking through to the page for the appropriate version, click the Download button and select a destination. When the download completes, launch the installer and click through the wizard. Again, after rebooting for the final time, check System Properties to ensure that Windows recognizes the new service pack.

At the end of any Windows Update (automatic or manual), it's always wise to perform a follow-up check. Recent updates often won't appear until prerequisite downloads have been in-

stalled, so you may need to run several subsequent checks until you have everything you need. Also, check all your devices and applications to make sure the service pack hasn't created any disruption. You may need updated drivers or versions, which are usually provided from affected manufacturers' Web sites. Finally, SP2 introduces a new Service Pack Clean-up utility, which cleans up leftover files. Simply type `compcln.exe` from the Vista Start Search box, press ENTER, and follow the on-screen instructions to free up some extra space. ■

BY GREGORY ANDERSON

## The Sounds Of Silence

One of few known issues with SP2 (Service Pack 2) is the possibility that your computer's audio hardware may stop working after the update. If you complete the installation and are greeted with a deafening silence, follow the steps below (also available at [support.microsoft.com/kb/948481](http://support.microsoft.com/kb/948481)) to resolve.

- Reboot one more time. This resolves many hardware issues quickly and easily.
- Disconnect and reconnect your speakers and any external audio hardware. This will force Windows to try and recognize them anew.
- Download Microsoft's automatic "Fix It" utility from [go.microsoft.com/?linkid=9668690](http://go.microsoft.com/?linkid=9668690).
- Download updated audio drivers from your sound card and/or speaker manufacturer's Web site. Make sure the versions you install are compatible with Vista SP2.



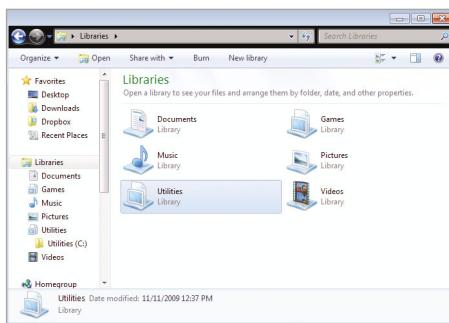
## Windows 7

# Home Networking The Easy Way

Windows 7 includes many changes to home networking that make it easier than ever to let computers and other network-enabled devices connect to each other and share data.

### Sharing With Libraries

Win7 introduces a new concept called Libraries that helps you access all files of the same type no matter where they are located within the Windows folder structure. For example, you might have several individual document folders on your hard drive (divided into home, work, and other categories), but the Documents Library will display them all. You can also add or remove folders to and from

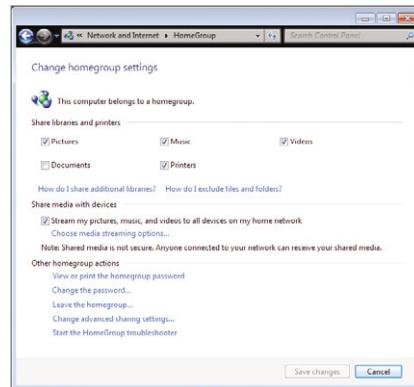


**Libraries collect files of the same type from multiple folders on the hard drive, letting you access them from one central place.**

Libraries manually to tweak them to your liking, delete Libraries without deleting the files referenced in them, or create entirely new Libraries.

To create a new one, right-click any file or folder you wish to include in the new Library, expand the Include In Library menu, and click Create New Library. The Library automatically inherits the name of the file or folder you right-clicked, and you can add any other files or folders to it just as you would with an existing library.

One of the benefits of using Libraries for file management is that you can share Libraries over your home network instead of having to flag a bunch of separate folders for sharing. This is accomplished using one of Win7's best new features, the HomeGroup.



**HomeGroup makes sharing files between Windows 7 machines on the same network a snap.**

### A Network Within A Network

The biggest change by far with Win7 networking is the debut of HomeGroup. Gone are the days of rooting around through networking windows, tweaking settings, managing domains, and performing all the other rigmarole necessary to get a few computers on the network to share files with one another. Now, you use a slick interface to set up a HomeGroup, and you're all set.

A HomeGroup is kind of a network within your network. It lets computers that are part of the HomeGroup share Libraries among one another. To establish a HomeGroup, click Start and open the Control Panel. Under Network And Internet, click Choose HomeGroup And Sharing Options.

When the HomeGroup wizard appears, click Change Advanced Sharing Settings and make adjustments to the radio buttons according to your preferences. In the Home Or Work section, we recommend turning on Network Discovery, File And Printer Sharing, Public Folder Sharing, Media Streaming, Password Protected Sharing, and HomeGroup Connections. Leave the Public section set to its defaults. If you have older networking equipment that doesn't support 128-bit file encryption, you'll need to set the File Sharing Connections radio button to Enable File Sharing For Devices That Use 40- Or 56-bit Encryption, or those devices will not be able to access files on the Win7 computer.

Click Save Changes (or Cancel if you didn't need to make any adjustments) and click the Create A HomeGroup button. A series of simple checkboxes lets you decide what

you want to share or keep private, and clicking Next brings up a password screen. Print it or write it down (pay close attention to capitalization, as it matters). Now, everyone with a Win7 PC who wants to connect to the HomeGroup may do so by going through the first part of the process outlined here, clicking Join Now instead of Create A HomeGroup, and entering the password. Also, if you already have one Win7 machine set up with a HomeGroup, any other Win7 computers that connect to that network will automatically generate a pop-up window asking if you'd like to join the HomeGroup. The only downside is that Windows XP and Windows Vista machines can't participate.

Another nice touch is that you aren't limited to sharing the pre-existing categories. Any Libraries you create can be added to the share list by right-clicking the library, expanding the Share With entry, and clicking HomeGroup (Read) if you want to give other PCs the ability to open files or HomeGroup (Read/Write) if you want to let other computers both open existing files and save new files to the library.

## New Network And Sharing Center

The Win7 Network And Sharing Center looks a lot like Vista's at first glance, but is much more elegant. To find it, click Start, Control Panel, Network And Internet, and Network And Sharing Center. The main interface is stripped down to the essentials most people need to access while keeping everything else just a click or two away. We especially appreciate how easy it is to manage wireless networks now, as the Network And Sharing Center provides quick access to options such as connecting automatically when the network is in range, setting preference levels when multiple connections are available, and adjusting security settings.

Every interface for all networking activities has also been updated to Win7 standards, and this is most apparent with the networking icons in the System Tray. Clicking the icon brings up a menu displaying all available networks so you can connect to any of them without having to drill down



**The new Network And Sharing Center is dramatically streamlined relative to the one in Windows Vista.**

through a bunch of windows or remember what selection to choose on a context menu.

## Enhanced Troubleshooting

In the past, troubleshooting network problems (click Troubleshoot Problems in the Network And Sharing Center) was a chore. Windows only had a few basic tools for auto-diagnosing and repairing, and finding the right Help category took a lot of knowledge. Win7 simplifies this by offering basic troubleshooting categories that walk you through a host of problems while automatically repairing a number of things that formerly had to be fixed manually. The troubleshooters are written in clear, jargon-free language and packed with explanations so you know precisely what you are doing along the way.

Overall, Win7 represents a significant leap forward for home networking, particularly if you have multiple Win7 machines and can take advantage of HomeGroup. As with most aspects of Win7, the networking-related interfaces work so well because they stay out of the way, providing only the options you really need when you truly need them. There's simply no going back to Vista and WinXP networking after getting a taste of Win7. ■

BY TRACY BAKER

## Play To

Windows 7 comes with a new version of Windows Media Player that includes an exciting new networking feature called Play To. This lets Win7 stream multimedia to any device in your home that is connected to the network and that is DLNA (Digital Living Network Alliance)-compliant, without the need for the DLNA device to interface directly with Windows at all.

Here's an example of how it works. Say you have a DLNA-compliant

HDTV (high-definition television) connected to your home network. Normally, if you wanted to stream pictures, music, or video to the HDTV, you'd need to use the HDTV's interface to browse for the content and open it. In Windows 7, the HDTV shows up in the Play To window, and you then push content to it from the PC instead of the other way around. You can select any combination of pictures, audio, and video, arranging them however you like in the Play To window before

clicking the Play button and sending the mix to the TV. This same simple interface can be used to control all your DLNA-compliant multimedia playback devices, including audio receivers, digital picture frames, printers, MP3 players, and many other devices. Better still, you can use the Windows 7 PC as a conduit for streaming multimedia stored on a DLNA-compliant external storage device, so the content being streamed doesn't even need to be located on the Windows 7 machine. ■

## DIY PROJECT

## Clean Your Workspace



**A**lthough it's routine to clean a bathroom or wash your car regularly, cleaning your computer workstation may seem like a foreign concept, especially if you're unsure about how to handle computer peripherals and their delicate features.

The family computer is always in need of a good cleaning. Regardless of the number of people using your PC or how often you put your hands on it, it should be dusted and disinfected regularly. This is especially important because a keyboard can be 700 times dirtier than a toilet seat, according to CleanPC ([cleanpc.com](http://cleanpc.com)) owner and founder, Richard Parent.

"Right now with the flu and H1N1 going around, I think you want to clean [your keyboard] a little more often," Parent says. "People think keyboards are so sensitive, so [they] never get cleaned." Even if you've invested in a keyboard or mouse constructed of germ-resistant materials, Parent says that once oils coat the peripheral, you still need to clean the surface.

How often should you schedule a cleaning for your PC workstation? If you clean, de-smudge, de-crumb, and disinfect several times a year, then you're doing well. Parent says that, on average, PC users should clean their workstations every couple of months.

Before you put on your proverbial cleaning gloves, be sure to gather all of the supplies that will transform

your workstation back into a gleaming and glistening machine (that may be in the eye of the beholder). One of the most important cleaning materials you will need is a lint-free dust cloth for wiping down your computer and peripherals. This is essential because you don't want to add more dust to your devices when you're trying to do the opposite. You'll also want to purchase a can of compressed air that you can spray in the crevasses between keys on your keyboard. In addition, you'll need cotton swabs, rubbing alcohol, and water.

### Clean Up After Your PC

Don't start the cleaning process without first shutting down and unplugging your computer. This is necessary to prevent changing any settings unintentionally or accidentally pressing a combination of keys when programs are open. Unplugging the PC also ensures your safety.

Parent says, "The most important thing when you're cleaning your computer is to turn it off. [PC users] start to wipe the keys and the next thing they know, inadvertently they have changed the settings or locked the computer

up." After you take care of this first step, you can start using the elbow grease to make your workstation spick-and-span.

### Keyboard

After turning off your PC, you'll turn your keyboard over and gently shake out any dust or food particles. You should primarily see the large crumbs fall out—this is a good thing. At this point, you'll use the can of compressed air to clear out dust and small debris or you can employ a keyboard dusting brush, such as the CleanPC Keyboard Scrub Brush (\$4.95). To disinfect, dip a cotton swab in rubbing alcohol and apply it to each key, making sure you run it around the edges and rub the top of each key. Finally, wipe down the entire keyboard with a dry, lint-free cloth.



If you've buried some crumbs between your keyboard keys, and they refuse to come out with a hearty shake, use the CleanPC Keyboard Scrub Brush to gently remove dust and dirt.

Spills might be a concern for you if you have children who frequently use the computer. If juice happens to tip over onto the keyboard, unplug the keyboard from the PC and turn it upside down to allow the liquid to drip out. Then, you can repeat the same steps outlined above to wipe away residue. Let the keyboard dry overnight.

## Mouse

Disconnect the mouse from your PC. If you're using a trackball mouse, you'll remove the mouse ball cover (typically by twisting until you feel resistance either clockwise or counterclockwise) and take out the ball. Wash the ball with water and let it air dry or wipe it dry with a lint-free cloth. Use swabs dipped in rubbing alcohol to thoroughly clean the rollers on the inside trackball enclosure. Return the ball to the trackball enclosure when it's completely dry and secure the cover.

Because optical mice lack a trackball and rollers, cleaning them is a snap. If your mouse is wireless, remove the batteries to power it off. Next, flip the mouse on its back and use a cotton swab to fish out any dust that has built up inside the small optical light hole. Some mice have small, flat feet that help them glide. If your mouse has feet, use a cotton swab and rubbing alcohol to remove gunk that has built up around the feet.



**The PixelClean Deluxe LCD Screen Cleaning Kit includes two sizes of ammonia- and alcohol-free LCD cleaning spray, two PixelWipe screen cleaning cloths, and four PixelClean travel pouches. Spray the LCD screen cleaning formula on the lint-free wipes and you can easily clean up your monitor.**

Cleaning your mouse is a fast, easy process, and it's also one that makes a noticeable impact on your computer's performance. When your mouse is clean, you'll notice that the cursor feels more responsive to your mouse movements.

## Monitor

LCD monitors collect dust quickly and can easily display smudges made by an overly curious finger-pointer or a child's playful hand. Start with a dry, lint-free cloth to see if you can remove surface marks—you can add a small amount of water to the cloth for stubborn smudges. Be sure to wipe off any liquid on the LCD immediately. You can also purchase a special cleaning kit designed for safely cleaning LCD mon-

itors. If you prefer the cleaning kit method, look for a set of professional alcohol- and ammonia-free spray applicators and dust-free cleaning wipes, such as the PixelClean Deluxe LCD Screen Cleaning Kit (\$19.95; [www.pixelclean.com](http://www.pixelclean.com)). As a general rule,

don't spray the cleaner directly on the LCD surface, but rather dampen the included cloth and apply it to the display.

## Phone

Phone receivers are undoubtedly a breeding ground for germs, so it's pertinent that you include your phone in your cleaning routine. Use cotton balls moistened with rubbing alcohol or an antibacterial wipe to cleanse both the phone and holder. You can also use a Q-tip and rubbing alcohol to clean the buttons.

## Cleanliness Is Next To Computing

A dirty or unorganized workstation makes a computing environment chaotic and unpleasant, so the best way to keep your space clean is to commit to preventive care. Avoid placing open containers of liquid and food items near your PC. Wash your hands before and after using your keyboard and mouse so as not to add to the number of germs already present on each component. Above all, remember to regularly clean your PC workstation. ■

BY JOANNA SAFFORD

## Germ-Free Computing

Maintaining a clean PC workspace not only means keeping the dust and grime off your PC peripherals but also killing germs that are camping out on your keyboard, mouse, and phone. To make it even easier to stay sanitized, you can purchase peripherals that are sealed with antibacterial solutions. Some models are also spillproof and waterproof.

### Silver Seal SSKSV107

\$49.99

Seal Shield

[www.sealshield.com](http://www.sealshield.com)

Seal Shield claims that its Silver Seal SSKV107 is "100% waterproof, spillproof, and dishwasher safe." It uses antimicrobial properties to protect against the growth of bacteria by

embedding silver ions into the plastic. The keyboard is also outfitted with laser-etched keys; that way, when you fully submerge the keyboard in water, you don't have to worry about losing any numbers or letters.

### EKB-97-TP Hygienic Backlit Keyboard with Touchpad

\$178

Econo-Keys

[www.econo-keys.com](http://www.econo-keys.com)

If you're really serious about staying germ-free when it comes to computing and you're also keen about touchpads incorporated into full-size keyboards, then opt for the Econo-Keys Hygienic Backlit Keyboard. The touchpad features both right- and left-click capabilities and supports Windows- and Linux-based operating systems. ■

# Power Protector

## Choose The Right Device To Guard Your Gear

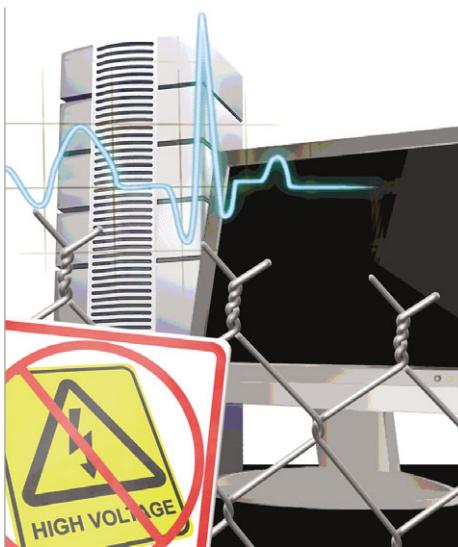
**W**hether you're concerned about quality, safety, or both, you should be paying attention to your system's power protection. Your PC's life may depend on it.

### The Problems

Let's identify what the risks to your equipment really are. A lot of jargon exists in the power industry, and to help clarify understanding, the IEEE (Institute of Electrical and Electronics Engineers) narrowed the range of power quality disturbances to a handful of phenomena in Standard 1100-1999. However, we want to keep this discussion easy to digest, so rather than talk about "impulsive transients," we're going to stick with the commonly used terms "surge" and "spike."

A **surge** is a short-term voltage increase, typically less than two seconds and of 500V (volts) or less. This can come from many sources, but often it happens locally when an appliance or other device drawing a large load shuts off. Imagine having three showers running in your home, each cranked to maximum output in order to get enough pressure. Then one shower shuts off, creating a sudden backup in the plumbing that results in an even stronger pressure "surge" to the other two showers until the system normalizes.

A **spike** is essentially a very sudden, strong surge. Lightning is often associated with spikes, and it's true that the magnetic distortions created by lightning, even flashes far up in the clouds, can cause massive line disturbances and inject current onto conductive structures, including power and networking lines. This is why it's always smart to unplug equipment during a



storm. No surge protector can guarantee protection against a nearby lightning strike. The spike will simply arc across the device and continue into your electronics. The question when shopping for power protection is how much abuse can a device absorb short of a lightning strike.

A **sag** is the opposite of a surge. It marks a temporary decrease in voltage. If you've ever noticed your lights dim when the dishwasher or a similarly large device starts up, that's a sag. This is because motors draw several times their normal current load while starting. This is also why it's always best to plug laser printers straight into the wall outlet rather than share them on

**This Monster Power HTUPS 3700 (\$999.95; [www.monstercable.com](http://www.monstercable.com)) is designed to protect high-end home-theater gear against just about anything short of a lightning strike.**



a strip with other devices, especially a UPS (uninterruptible power supply). The load they draw when starting a print job, combined with the draw from other devices, can often be enough to blow a fuse or cause a battery backup to kick in, which in turn weakens the battery. A prolonged sag is called a **brownout**. Modern PC power supplies are designed to withstand a limited degree of sag and brownout (as well as their overvoltage opposites), but prolonged exposure can ultimately damage components and lead to premature failure.

An **interruption** marks a complete power loss, even if just for an instant. PCs can usually tolerate a fleeting interruption, but we all know what happens when there's no electricity flowing—unless you have a UPS standing ready.

**Line noise** is unwanted current or voltage, often derived from EMI (electromagnetic interference) and/or RFI (radio frequency interference). If you've ever seen your Wi-Fi connectivity get trashed by a microwave oven or cordless phone, that's RFI. EMI often results from poor grounding and nearby power supplies, although fluorescent lighting is another notorious source. As mentioned above, line noise can distort audio and video quality, but it can also result in data errors and premature component failure.

### Surge Protectors

Until our national power infrastructure is significantly overhauled, expect rising power demands to continue to strain the electrical grids. From strain

comes problems, and utility companies are engaged in a never-ending balancing act. You have no control over the utilities, weather, or even your neighbors, but you can control how you guard against the unknown.

People often use the terms "power strip" and "surge protector" interchangeably, not realizing there's a significant difference. A power strip is little more than a multi-outlet extension cord with little or no protection built-in. You don't really start to have protection until you have a surge protector with integrated MOVs (metal-oxide varistors). These parts essentially divert excess voltage onto the ground line. Naturally, there are different quality grades of MOVs. The best are fireproof and have features such as ceramic casing. If a surge or spike exceeds the MOVs' capabilities, a second line of defense is a fuse, which will burn out and disconnect the circuit when the heat from excessive current grows too great.

"Surge protection is measured in joules," says Vern Smith, head of Monster Power ([www.monstercable.com/power](http://www.monstercable.com/power)). "Higher numbers mean more protection. But no matter how high the joule rating, if a surge exceeds



The Panamax M8-HT (\$99.95; [www.panamax.com](http://www.panamax.com)) is built for mainstream consumers who want to guard their electronics against line noise and voltage fluctuations.

the unit's ability to absorb power, your equipment is in danger. Look for power products with auto-disconnect circuitry that isolates your equipment from damage, no matter how powerful the surge."

A joule is a unit of energy. A joule rating is the only quality specification you'll see on practically every surge protector, cheap or expensive, and it refers to the number of MOVs used. As a very rough guideline, consider a 200 joule rating to be minimal and 1,000 or higher to be better quality. That said, debate exists in the electrical community as to whether joule ratings

are truly meaningful measurements. More experts agree on the merits of measuring clamping voltage, also called let-through voltage. This is the voltage threshold at which MOVs will start conducting current to the ground line. Lower numbers are better. The lowest rating specified by UL (Underwriters Laboratories) for surge protectors is 330 volts.

Julia Fann, product manager for power systems at Belkin ([www.belkin.com](http://www.belkin.com)), recommends that consumers determine four things in order to reach a surge protector buying decision: 1) where/how the surge protector

## Daisy Chaining

Sometimes there just aren't enough outlets to go around, particularly with all of today's devices and add-ons. So, you plug one strip into another strip into an extension cord, and so on. But consider yourself warned: If you daisy chain your surge protectors and extension cords, you are not up to code—specifically the National Electrical Code. In the workplace, you're also in violation of OSHA (Occupational Safety and Health Administration) regulations. Should you care?

"Daisy chaining can cause power shortages, because the electronics connected are drawing more power and amperage than what the surge protector or wall outlet can handle," says Julia Fann, product manager for power systems at Belkin. "With excess electrical wires that have a charge running through them, if they're improperly disconnected—like if someone trips on the wire or surge protector—the plug and wires can be damaged and increase the risk of faults."

The problem is that most surge protectors and power strips only offer a half-dozen or so ports. They're designed to accommodate the amount of power available from a standard wall outlet. Daisy chaining allows you to easily exceed the current load available at that outlet, particularly if another outlet on the same circuit is similarly overloaded. Usually, this will result in a tripped circuit breaker, but it can also result in a fire.

Putting a power strip on an extension cord introduces a related problem because

electrical resistance increases with distance. This is why surge protector cords have the limited lengths they do. More resistance generates more heat, which in turn can lead to equipment failure and/or fire. Just because you've never seen daisy chaining result in a fire doesn't mean it never happens. The National Fire Protection Association reported an annual average of 280 electrical fires were caused by outlets, switches, and wiring between 1999 and 2002. ■



This Belkin Mini Surge Protector (\$24.99; [www.belkin.com](http://www.belkin.com)) is designed for travelers, offering a 918 joule rating and two convenient USB power ports.

will be used (home essentials, home office, home theater, etc.); 2) what kind of devices will be plugged in; 3) the number of devices that will be plugged in; and 4) if the electronics being used have coaxial, telephone, or Ethernet connections. If so, the surge protector should also guard those connections. These criteria will help guide you in selecting the surge protector's form factor, protection capacity, and secondary features.

### Other Considerations

If the thought of losing work because of a power outage puts your stomach in knots, you need a UPS. As with surge protectors, good UPSes will feature quality MOVs, as well as impressive joule and clamping voltage specs. The details of battery backup take us in a whole different direction that's out of the scope of this article, but suffice it to say that you'll want to know the total wattage draw of your equipment and know how many minutes you want your battery to last before power loss. In reality, five minutes is usually plenty for an orderly shutdown—two minutes to see if the power comes back on and three minutes to save and close everything. Paying for substantially more backup time may serve no purpose. Also, be sure to investigate whether the UPS' battery can be replaced and what is involved in recycling the old unit.

Automatic voltage regulation goes by many names, but the core idea is that the protection device smooths out the lilt to moderate over- and undervoltages that systems constantly experience. This is meant to reduce wear and tear on the protected gear, power supplies in particular. Because UPSes with voltage regulation put their circuitry between the wall and the battery, the battery won't get cycled as often and will last longer.

Noise filtering is another excellent feature but a very difficult one for consumers to get a sense of just by looking at the product's specs. Monster Cable markets the feature under the Clean Power name and uses five levels, each successive level noting a higher number and variety of filters. The best way to judge filtering is through professional reviews done with high-end testing equipment.

"Green" (environmentally friendly) qualities are a particularly big selling point right now, with the main feature involving cutting power to certain outlets with turned off devices attached. Normally, a powered-off device still wastes a small amount of power over time. According to Belkin, which markets

its remote controlled Conserve surge protector family around this feature, up to 10% of a home's power consumption is this type of wasted standby power. Tripp Lite ([www.tripplite.com](http://www.tripplite.com)) does much the same with its ECO Series UPS systems, which rely on automatic draw sensing rather than remote control. Tripp Lite claims the feature can reduce annual energy bills by up to \$50. Not every outlet on a green surge protector gets shut down, though. For example, many users leave their PCs running in hibernation throughout the night but totally turn off peripherals, such as monitors and printers.

The sky is nearly the limit when it comes to surge protection. Your investment should be appropriate to the equipment you're guarding. A \$10,000 home theater probably deserves \$500 to \$1,000 in protection; a \$400 student PC does not. If data integrity and media playback quality are important, you'll want at least base-level noise filtration, and your attention to features such as voltage regulation and battery backup may be a higher priority if you're in a building or area with poor power conditions. For most consumers, \$100 buys a decent, all-purpose UPS with adequate power protection for a typical PC configuration. ■

BY WILLIAM VAN WINKLE



Tripp Lite's ECO750UPS (\$89; [www.tripplite.com](http://www.tripplite.com)) sports four auto-sensing "green" outlets.

# READERS' TIPS

COMPILED BY NATHAN LAKE

Many of our readers come across fast, easy ways to solve a problem or accomplish a task. Well, we'd like to hear about it! If you have a great tip you'd like to share, email us at [readertips@smartcomputing.com](mailto:readertips@smartcomputing.com). If we print your tip, we'll send you a free *Smart Computing* T-shirt. You'll be the envy of all (well, some) of your friends.

Please include your first name, last name, and address, so that we can give you credit if we print your tip. (And so that we can send your T-shirt to you, of course.) Please limit your tip to 200 words or fewer. Not all tips received will be printed, and tips may be edited for length and clarity.

# Short & Simple Tips To Make Things Easier

## A Quick Recovery

When I email, I typically use my POP (Post Office Protocol) account from my ISP (Internet service provider), but I also keep a Gmail account, where I forward all my important software registration codes and passwords. Recently, I had a problem and had to reformat my hard drive. My recent email backup of my main email account was corrupted. Fortunately, I could still reinstall my software, because I backed up the registration codes and passwords to my Gmail account.

Hank H., Easthampton, Mass.

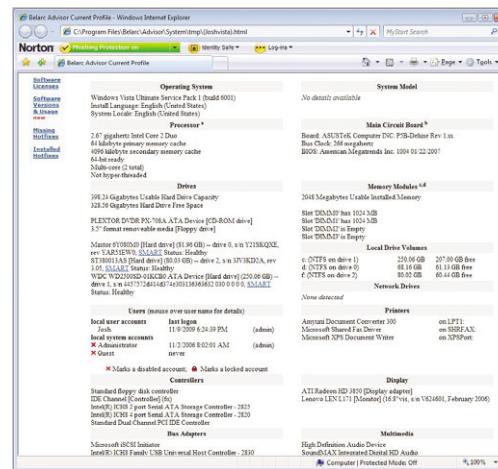
## Limit Your Favorites

If you are using Internet Explorer 8 and have a long list of Favorites, it's a good idea to organize the list into folders using easy-to-identify category names, such as Everyday Web Sites. In IE8, click Favorites, click Organize Favorites, select New Folder, and enter a title that's helpful for reference. Do so for each category you want. Then, select each Web link and drag and drop the bookmark into the respective category folder.

Dennis S., Largo, Fla.

## Do Your Homework

In the October 2009 issue, the article about drivers on page 55 goes into great detail about "doing your homework," such as gathering information about your system, hardware, and software. I'd like to suggest you visit Belarc ([www.belarc.com](http://www.belarc.com)) and download its Advisor program. The software produces a report in a logical layout that displays your installed software, hardware, and antivirus data with serial numbers,



Belarc Advisor provides a comprehensive list of system settings, Windows updates, and computer hardware.

models, and versions. Additionally, you can see any hotfixes and updates that are missing from your PC. I also like Belarc Advisor for preparing to upgrade to Windows 7, because it gives me all the information I need to re-create my setup after a clean install. Belarc's latest version also supports Win7.

Phil G., Stockton, Calif.

## Label Your PC's Cables

When I recently opened my computer to replace the video card and add some memory, I was struck by the rat's nest of cables to the back of my PC, adjacent USB hub, and the router; I stopped counting cables at 26. To help myself when reconnecting the cables, I opened WordPad, set the font to Arial 16, and entered brief descriptions with two blank lines between each label. After I printed the page of labels, I covered the sheet with package sealing tape and cut the tags apart. Next, I punched a small hole near the end of the tag and attached a loop of thread, so I could tie each label to the corresponding cable. Now, I don't have to follow each cable to the other end to see what it serves and guess which port it connects to.

Bruce P., Ridgefield, Conn.

## Mac Corner

# Replace Your MacBook's Battery

You love Apple's MacBook because it packs lots of power in a small, portable package. But over time, you're starting to notice that it just doesn't last as long away from a power outlet. You used to get three hours of work at the coffee shop, perhaps, but now it's down to one measly hour. You're in luck: This lousy state of affairs has a simple cure. Get a new battery and get back in business.

In this article, we'll show you how you can determine whether your battery has given up the ghost. Then we'll talk about where to go for a replacement. We'll also do a step-by-step walkthrough of the battery transplant and then talk about both extending the life of your new battery and what to do with the old one. Let's get started.

### Know When It's Gone

The first sign of trouble with any battery is the feeling of getting less juice over time. What starts as a nagging sense turns into dreaded certainty as running time changes from hours into minutes. Everyone has a different tolerance depending on how often they rely on their MacBook's battery, but if you spend any time at all away from a power outlet, you will have a point where enough is enough.

Once you have the feeling, you can back it up with numbers. Apple's System Profiler tool provides detailed information about the health of your battery. You can get to it by choosing About This Mac from the Apple menu and then clicking the More Info button. Once the System Profiler launches, choose Power from the list of resources on the left. On the right side of the window, you'll see information about your battery. Take note of



the items under both Charge Information and Health Information.

A battery's capacity is measured in mAh (milli-amp hours). Our MacBook Pro has a fully charged capacity of 4,500 mAh—with a claimed 4.5-hour battery life, we can assume the computer draws about 1,000 milliamps per hour. What power actually gets drawn depends on a variety of factors: display size and brightness, hard drive activity, and optical drive access, for example.

But over time, a battery's ability to reach its full charge diminishes; the Li-Ion technology used in batteries has a tendency to decline at a rate of about 20% each year. Where once you may have been able to charge up to 4,500 mAh, you might now only reach 1,000 mAh. The number to check here is the Full Charge

Capacity: The lower that number gets, the less longevity you'll enjoy. The System Profiler is kind enough to provide a qualitative assessment of these numbers. If that fully charged capacity gets too low, the Condition heading will read Check Battery. (Fortunately, the battery being tested in our screen shot is in Good condition.) If you're seeing low numbers here, then it might be time to get a new battery.

### Where To Go

Most Mac users, when faced with a consumable that needs replacing, will head off to their nearest Apple store. That's certainly a viable option, but you may be able to find a better price, and for bonus points, greater electrical capacity than Apple offers. For these

reasons, you may wish to consider a third-party option.

Kyle Wiens is the CEO of iFixit ([www.ifixit.com](http://www.ifixit.com)), a proactive Mac repair Web site. His company provides free instructions for replacing many parts on a variety of Macs, and they'll sell you the parts to boot. We asked Wiens about finding a good-quality replacement battery. "Make sure you get it from a reputable supplier," he notes.

In particular, Wiens says, "Watch the milli-amp-hour rating on the new battery." Before buying, ask the retailer what the maximum charged capacity is. If they don't know, or if they give a figure that's too low, then move on.

Another factor to consider is the age of the battery, particularly when you're looking for a replacement for an older Mac. As we've seen—and as you've likely experienced firsthand—batteries diminish over time, whether they're used or not. So make sure your new battery isn't simply "new, never used," but "recently manufactured." A 5-year-old battery isn't going to do you a lot of good.

Wiens points out two companies that manufacture batteries for Apple notebooks: MadsonLine ([www.madsonline.com](http://www.madsonline.com)) and BTI ([www.batterytech.com](http://www.batterytech.com)). The latter vendor in particular has a comprehensive selection of batteries for Mac laptops going back to the dawn of the portable computing age (or thereabouts).

Now, with your battery in hand, it's time to install it.

## The Replacement

If your computer is more than a year old, then you're in luck: Swapping out a battery is the easiest computer maintenance task you could ask for.

But if you own one of Apple's newest laptops, such as the unibody aluminum MacBook Pro or unibody polycarbonate MacBook, you're in for some work. On those computers, the entire unit has been sealed; the battery isn't intended to be user-

**1**  
The 15-inch MacBook Pro from 2008 features a tab latch to access the battery.



replaceable. For those machines, the safest course of action is to take your Mac into the Apple store, where a Genius will be all too happy to do the work for you.

It's possible to disassemble these MacBooks and replace the battery yourself, but Apple warns against it. Any damage you might cause won't be covered by a warranty, so proceed at your own risk. For the rest of you with a standard older model, here's how to swap a battery.

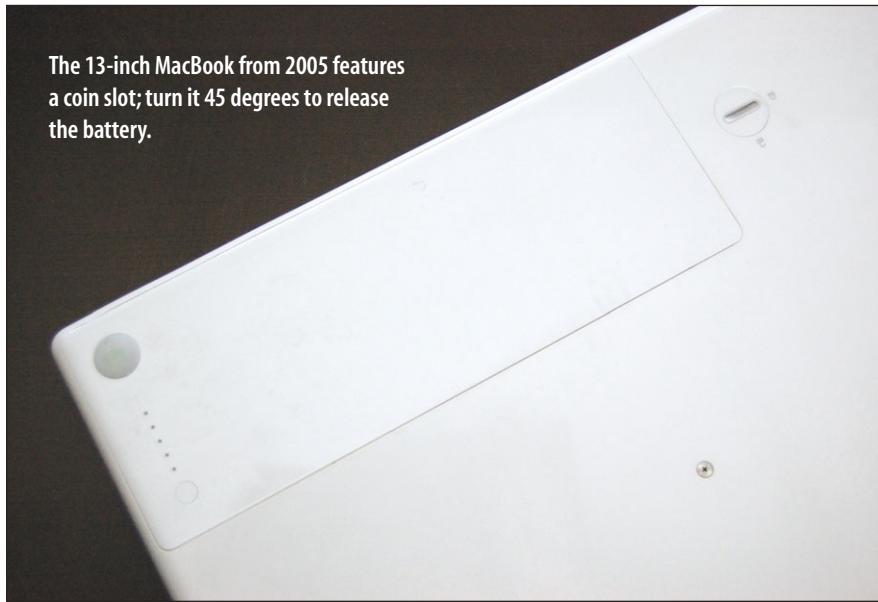
**1** Shut down your Mac. Close your running programs and select Shut

Down from the Apple menu and let the computer power down completely and cool.

**2** Flip your MacBook over. Rather than placing it directly on a flat surface, use a towel to protect the top of your MacBook.

**3** Find the battery access hatch and open it. Apple has used a variety of latch mechanisms over the years. Many earlier models use a latch that has a slot: Use a coin to turn it 45 degrees and release the battery. More recent models feature a tab that you push in: Flip up the tab to release the battery.

**1**  
The 13-inch MacBook from 2005 features a coin slot; turn it 45 degrees to release the battery.



**4 Remove the battery.** Before taking out the battery, look for where the battery connects to the computer. Lift up from the opposite side and then pull the battery away from the connector.

**5 Insert the new battery.** With the same angle of insertion as you used to pull the battery out, slide the new one into the connector and then ease the other side into the opening.

**6 Close the battery access hatch.** Make sure the latch is open when you replace the cover, then ease the latch shut.

All done. Now plug your MacBook back in, let it get a good full charge, and get back to work.

### Make It Last

Now that you have a new battery, you probably want to ensure that it stays healthy for as long as possible. Here are some techniques that you can put to use right now.

First, within the first week of owning your new battery (and this applies to a second battery as well as the original battery in a brand-new Mac), you'll want to *calibrate* it. Apple provides this guidance in its manual for many of its portables:

**1 Plug in the computer until the battery is fully charged.** You'll know it's fully charged when the tiny LED light on the power adapter turns green and the battery icon in the menu bar indicates a full charge.

**2 Keep charging the battery for an additional two hours.** You can use the computer during this time, as long as it's plugged in. This time is spent "topping up" the battery using a low trickle of current.

**3 Unplug the computer and burn through the battery.** Use the computer normally until you see the low power warning. Then continue using the computer until it falls asleep to preserve its remaining power. You may

The e-Stewards website homepage features a globe icon and the text "e-Stewards". Below the header is a banner with the text "The globally responsible way to recycle your electronics... look for the e-Stewards logo!". A small note below the banner states: "On November 10th 2008, a day after being featured on the CBS program 60 Minutes, the Basel Action Network proudly announced a transformation of the existing program to a fully accredited, 3rd-party audited certification process. This is a 'Champions Certification' - © March 4th, 2010 - recycled condition, based on independent audit and verification." To the right of the banner is a button labeled "e-Stewards Standard Now Available!" and another button for "E-STEWARD NEWSLETTER SIGN UP".

### Look for a place to recycle your used MacBook battery at e-Stewards.

wish to save your work and close programs during this time.

**4 Keep the computer unplugged for five hours.** While asleep, the Mac continues to use electricity; this time will ensure the battery is completely discharged.

**5 Plug the computer in again and give it a full charge.** In other words, follow steps one and two again to ensure you reach maximum capacity.

Apple recommends following this procedure on a regular basis—as often as once a month. The theory behind this practice is to take advantage of a property of Lithium-based batteries: They need to have the electrons flow within them or their capacity diminishes. So if you're a public transit commuter, perhaps, and you rely on your battery on a regular basis, you probably don't need to run through this procedure. If, on the other hand, you are mostly a desk-bound laptop user, you'll benefit from exhausting your battery from time to time.

One advantage that the older Macs have over the newer models is that, with the battery being easily replaceable, you can have more than one. Your older battery may still find some use as a final bit of oomph when your new battery runs out, so keeping it on hand isn't unreasonable. But if you find yourself not using it very often, be sure to keep it partially charged and in a cool environment—think basement rather than attic, when looking for a place to put it. That's because electrons move more slowly when they're cool;

think of it as suspended animation for batteries.

That advice applies equally well to the main battery in your MacBook. Do you see yourself chained to your desk for weeks or more? Consider removing the battery and simply keeping the computer plugged in. If you store the battery in a cool environment,

it'll maintain its good state for much longer than if it sits inside your hot computer. Just be careful if you do try this. Because the battery is one of your Mac's heaviest components, removing it distinctly alters the balance of your Mac. Be careful not to drop the computer if you move it.

### What To Do When It's Over

These days, it's impossible to talk about batteries without considering the question of disposal. These dense little wonders are a cesspool of heavy-duty chemicals locked inside shiny plastic or aluminum cases. Wiens from iFixit is quite emphatic about this. "E-waste is a huge problem; it's extremely important to recycle [the battery]," he says. Major retailers such as RadioShack will recycle batteries. Wiens also recommends finding a partner service through e-Stewards.org, an organization that pledges to implement best practices in the disposal and recycling of electronic waste. You can find a local list of recyclers on their Web site at [tinyurl.com/cfa5cc](http://tinyurl.com/cfa5cc).

### You're Back In Business

With a fresh battery and maybe even a somewhat useful backup tucked safely in your bag, you're ready for your life as a road warrior. In fact, your biggest problem may be figuring out what work you can do in three to five hours, instead of the one-hour limit you had before. ■

BY AARON VEGH

# Web Tips

## Enhance Your Time Online

### Send Large Emails

**Problem:** Sometimes items I want to send via email are too large.

**Solution:** When you need to send a sizable file, such as a photo or a PDF (Portable Document Format), you'll have an issue if your standard email service doesn't support transferring oversize files. In these types of scenarios, it's a good thing there are sites such as 2Large2Email (2large2email.com), which sends the recipient a download link instead of multiple megabytes of data that can overload his inbox. The 2Large2Email interface should look familiar because it resembles an email composition window; you simply type in the recipient's address, create a message, attach the file, and send the message. A download link will be sent to the recipient and also appear on-screen for you. You won't pay anything to send a 100MB file to one recipient or for the free version of the 2Large2Email service (with a 200MB max file size and limit of 100 downloads). The Basic plan is \$12 per month and comes with 6GB of storage.

### Control Site Usage

**Problem:** I tend to spend too much time on social networking sites. How can I limit the amount of time I spend online?

**Solution:** If social networking sites seem more like time-wasters than communication tools, you might want to set some time boundaries for Facebook ([www.facebook.com](http://www.facebook.com)), MySpace ([www.myspace.com](http://www.myspace.com)), or any other tempting Web site. Enter the site you'd like to set a limit for in the Open box at [minutesplease.com](http://minutesplease.com), enter the desired time limit, and click the Please button. MinutesPlease will open a new window for the site and close the window after the specified amount of time. You can also create browser shortcuts such as [minutesplease.com/\[Website\]](http://minutesplease.com/[Website]), which lets you visit for 10 minutes.

### Try New Phones

**Problem:** I'm interested in getting a mobile phone, but I

would like to try one out before I make a decision. How can I do this without going to my wireless carrier store?

**Solution:** Instead of reviewing product specifications and making an educated guess when you're browsing new phones, go to [tryphone.com](http://tryphone.com), where you can essentially test-drive mobile phones. TryPhone gives you the opportunity to interact with some popular phones, such as the Apple iPhone, Nokia N95, BlackBerry Pearl 8100, and Motorola RAZR V3t. Choose a phone, and you'll find reviews, specifications, demos (click-by-click steps), and a larger-than-life-size version of the phone model. You're able to click each button as if the phone were resting in your hand, with a few restrictions.



TryPhone.com lets you virtually interact with popular cell phones and smartphones, so you can test a model before you buy.

### Anonymously Search Jobs

**Problem:** I want to search for a new job, but I would not like my current employer to know.

**Solution:** Taking the next step in your career path while working for your current employer can be tricky, especially if you decide to display your contact information online. QuietAgent ([www.quietagent.com](http://www.quietagent.com)) makes your job search private by letting you build a free, professional career profile that gives employers an opportunity to see if your skills match their job description. QuietAgent operates as a silent partner that pairs you with the right positions. You can respond to employers at your discretion.

### Animated PC Building

**Problem:** Is there a way to learn how to build a PC using visuals?

**Solution:** There are a lot of resources for learning to build your own PC, but a visual learner will likely appreciate PCitYourself ([www.pcityourself.com](http://www.pcityourself.com)) for its clear, animated step-by-step guides to choosing PC components, building a desktop PC, and installing software. Each section explains steps through animated video clips and explanatory text. The Notes section informs you of important installation do's and don'ts. If you still need some assistance, you can consult the PCitYourself forum for guidance from users and PCitYourself administrators.

BY JOANNA SAFFORD

# Find It Online

# Meet Your New Year's Resolutions

## Mayo Clinic

[www.mayoclinic.com](http://www.mayoclinic.com)

If your New Year's resolution is to improve your overall fitness, the Mayo Clinic can help. The Fitness section of the Mayo Clinic Web site offers helpful information when it comes to improving your flexibility and fitting aerobic and strength training into your life as well as links to fitness-related articles that can help you learn more about your physical health and exercising. To find the Fitness section, click Healthy Lifestyle on the main page and then click Fitness. The Multimedia tab provides videos showing you how to do several exercises with and without a variety of fitness accessories (such as weights, balance balls, and resistance bands), so you can start your program right away. By the end of the year, the Mayo Clinic will have you looking and feeling great.

## Nutrition Diva

[nutritiondiva.quickanddirtytips.com](http://nutritiondiva.quickanddirtytips.com)

Eating well is a challenge in a world full of unhealthy foods, but the Nutrition Diva can help you get your diet on track. She offers several tips about anything and everything related to healthy eating. Many of her articles and podcasts are related to frequent issues and questions people have, such as understanding the difference between whole grain



and multigrain and knowing how much water you need to consume throughout the day. She also offers tips for general health, including how to slow the signs of aging. Whether your goals for the New Year are tied to weight loss, feeling more energized, or just learning more about healthy eating, the Nutrition Diva has the information you need.

## Serve.gov

[www.serve.gov](http://www.serve.gov)

Helping others can go a long way in making you feel good about yourself and improving your community. United We Serve is a service initiative created to inspire more volunteerism in communities across the United States, and Serve.gov is its official Web site. Under Find A Volunteer Opportunity on the Serve.gov home page, enter your interests and location and then click Find Opportunities Now. From there, you'll be redirected to a new site that presents a list of local volunteer needs. You can also create your own service project to address specific concerns you see in your

## That's NEWS To You

Finding the appropriate online group to match your interests can be a monumental task. So each month, we scour the Internet to bring you the friendliest forums and most interesting bloggers the Web has to offer. This month, we share a blog that can help you achieve your New Year's resolution to declutter your life.

## Unclutterer

[www.unclutterer.com](http://www.unclutterer.com)

Many people have a hard time parting with things they've had for a long time—even if they no longer have a use for them. Unfortunately, that often leads to cluttered, messy home and work spaces.

Unclutterer concentrates on providing tips and advice about how to maintain an organized, clutter-free household and office workspace. Whether it's offering new uses for old things or the motivation

## unclutterer.



Archives for Weekend Projects

### Weekend Project: Your closet floors

This weekend's project idea is more of a cleaning project than an uncluttering project, but you'll likely end up doing a bit of uncluttering to be able to do the cleaning. To be able to vacuum and/or sweep the floors of my closets, I have to pull out storage containers and crawl on my hands and knees to reach back into some of the corners. Inevitably, I find something that I didn't remember was there and I end up clearing a bit of clutter out of my home.



### Welcome.

Unclutterer is the blog about getting and staying organized. A place for everything, and everything in its place is our gospel. [Learn more »](#)



to throw out those decades-old sweaters, Unclutter-er wants to help

you transform your home and office into a stress- and clutter-free environment.

community. To learn how you can get started with your own project, click the View The Toolkits link at the bottom of the page. Then, grab some friends and achieve your resolution to help others this year.

## Yahoo! Finance

[finance.yahoo.com](http://finance.yahoo.com)

If your goal is to get on top of your finances this year, you can find plenty of information at Yahoo! Finance. This Web site has sections about investing and managing your personal finances as well as news, opinions, and other information on financial topics, such as the stock market. Under the Investing section, you can get market updates, read about market statistics, and learn how to invest your money wisely. The Personal Finance section offers help with topics such as your retirement portfolio, savings accounts, real estate, and taxes. Yahoo! Finance has a variety of information to help people with all income levels and financial needs.

## The Daily Green

[www.thedailygreen.com](http://www.thedailygreen.com)

A resolution to join the environmental movement can help you save money and clean up the earth at the same time. The Daily Green is a resource for anyone looking for tips about how to be more environmentally friendly. If you're wondering just how "green" you really are, or if you're looking for tips to help implement earth-friendly principles into your day-to-day life, check out the information found under the Tips & Advice section. The Green Homes tab at the top of the page offers information about how to clean and outfit your home in a greener way. Plus, you can find environmentally friendly recipes in the New Green Cuisine section.

Editor in chief of Unclutterer Erin Doland used to be someone who let clutter control her life. According to Doland, she was often stressed out and never entertained at her home because she was embarrassed about her lack of organization. But with some encouragement from her husband, Doland finally decided it was time to let go of the clutter, and in March 2007, she began to share her experiences on the Unclutterer blog.

For those who aren't sure if they can ever overcome the clutter and mess in their home and office, Doland has some words of advice. "Everyone has to learn to be organized," Doland says. "You can't force someone to be organized or to be an unclutterer. I decided I wanted to get rid of the clutter to make way for what matters most to me, and so I made the switch. Anyone can do it; it's just a matter of putting forth the effort if you want to make it happen." ■

# Share The Wares

Some of the best apples in the online orchard are the free (or free to try) programs available to download. Each month, we feature highlights from our pickings. This month, we take a look at a fitness goal-setting program.

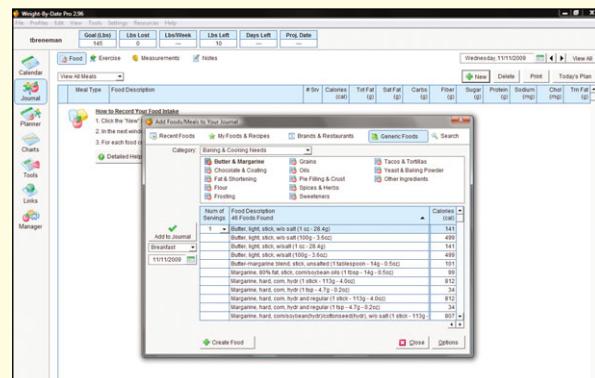
## Weight-By-Date Pro

[www.weightbydate.com](http://www.weightbydate.com)

Making weight loss and fitness a priority this year is an important step in getting your health on track. But like many resolutions, it's easy to give up in the first few months if you aren't seeing the results you want. To mark your progress and help keep your goals on track, try Weight-By-Date Pro (free 15-day trial; \$57.99 download; \$64.99 CD-ROM).

This program provides a planner for your weekly food intake and workout regimens as well as calorie information about the foods you add to the daily food intake journal. Weight-By-Date lets you compare your food and workout records with your planner to see how often you meet your goals. You can also track your body measurements to see how many inches you take off throughout your weight-loss journey. Additionally, the Tools section of Weight-By-Date Pro lets you set a goal date for your weight loss, helps you calculate the number of calories you need per day, and provides you with an estimate of your BMI (body mass index).

To get started with a free trial of Weight-By-Date, click the Try Now link at the top of the home page. On the next page, click Download Now. Once the program has downloaded and installed, you will be prompted to create a profile by entering information, such as your height, birthday, gender, goal weight, starting weight, and diet information. You also will have the option of tracking up to 10 daily nutrients (such as total fat, calories, protein, and sodium) as well as your daily meal targets for those nutrients. ■



Weight-By-Date Pro includes nutrition information, such as the calorie amount, total fat, and fiber, for all types of food. This lets you accurately document your daily food intake.

# Apple Safari

## Take A Tour Of The Web

**L**ike a reliable pair of slippers, your Web browser is always there for you. However, it's easy to get overly comfortable with just one browser, even when today's market features plenty of fast, powerful, and flexible browser choices. One of these browsers is an up-and-coming contender from Apple, which offers a free Windows-compatible version of its Safari browser.

Like Google's Chrome browser, one of the primary attractions of Apple's Safari 4 is speed. But while Safari boasts generally faster speeds than several other browsers, it also delivers an engaging set of Web productivity features. This article will help you get up and running with Safari and become more familiar with Apple's unique browser approach.

### Jump On Board

To download Safari, open your usual browser, such as Internet Explorer, and browse to [www.apple.com/safari/download](http://www.apple.com/safari/download). Although Apple's Safari download site should automatically recognize that you're using a PC and subsequently select the correct browser version, make sure that Safari for Windows XP, Vista, or 7 is selected. Click Download Now to start the download process and then choose a location on your hard drive to save the setup file, such as your Windows Desktop.

Next, locate the setup file (named *SafariSetup.exe*) and click it. If Windows displays a security warning before opening the setup file, click Run to proceed. Click Next on the Welcome To Safari Installer screen, accept the License Agreement, and click Next.

On the following screen, the Safari setup program asks if you want to install Safari Desktop Shortcuts and/or

Bonjour For Windows. The Shortcuts option places one shortcut (for Safari) on your Desktop. Bonjour is network-related software that allows easy configuration of computers, printers, and other devices on networks, particularly if your network has both PCs and Macs. Further, if you use an iPod and want to share music libraries on your home network using iTunes, Bonjour helps to ease that task. If you're neither using a mixed (PC and Mac) network nor using iTunes, you probably don't need Bonjour.

Also on this screen, you can choose the program's installation folder, which defaults to C:\Programs Files\Safari. To select a different installation folder, click Change, browse to select a new folder on your hard drive, and click OK. Click Install to start the installation. When the setup program finishes, it will show the option to open Safari after the setup



**Safari's default layout is sparse and clean, but enabling the Menu Bar is enormously helpful when you want to access configuration, viewing, window, and other options.**



program closes. Click Finish to complete the installation.

### Ease Your Transition

If you're familiar with Internet Explorer, you shouldn't have much trouble finding your way around Safari. However, one step that makes your Safari experience much easier is instructing the browser to show the Menu Bar. To do this, click the Safari settings icon (it looks like a gear) in the upper-right portion of the browser and click Show Menu Bar. This unveils the File, Edit, View, and other menus that contain commonly used browser functions. Once you configure your browser and grow more familiar with its settings, you can always turn off the Menu Bar to save space.

Now that the File menu is easily accessible, you can import bookmarks from your other browser (or browsers). In Internet Explorer, click File (if you don't see a File menu, click View, select Toolbars, and select Menu Bar). Click Import And Export, click Export To A File, and click Next. Select Favorites, click Next, select the Favorites (bookmarks) folder you want to export, and click Next. Select the folder where you want IE to

export your bookmarks, click Export, and click Finish.

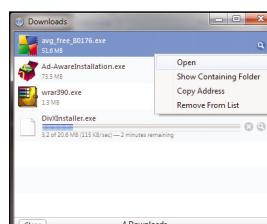
Back in Safari, click File, click Import Bookmarks, and click to open the exported bookmark file from your other browser. These bookmarks will appear as a folder under Safari's Bookmark's section (which opens automatically when you import bookmarks). You can opt to rename that folder or even place it in another existing bookmarks folder.

## Download Lowdown

When it comes to downloading files, Safari doesn't differ much from IE, Firefox, or other browsers. When you click to download a file from a Web site, Safari displays a File Download Security Warning window that asks if you want to Run or Save the file (or Cancel the download). If you choose to run the file, Safari will download the file and immediately open it. If you click Save, Safari will download and save the file in your default download folder.

To specify this download location, click Edit, click Preferences, and choose the General tab. You'll see the current download folder beside Save Downloaded Files To, but to change it, click the drop-down menu, click Other, browse to select a different folder, and click OK. You can also instruct Safari to automatically download files by removing the check mark beside Always Prompt Before Downloading, although Safari will continue to display the security window for certain high-risk files, such as applications.

Safari keeps track of things you download in its Downloads window, which automatically opens when you download a file (or files). This tool is particularly useful when you've downloaded multiple items, as it gives you quick access to the downloaded files



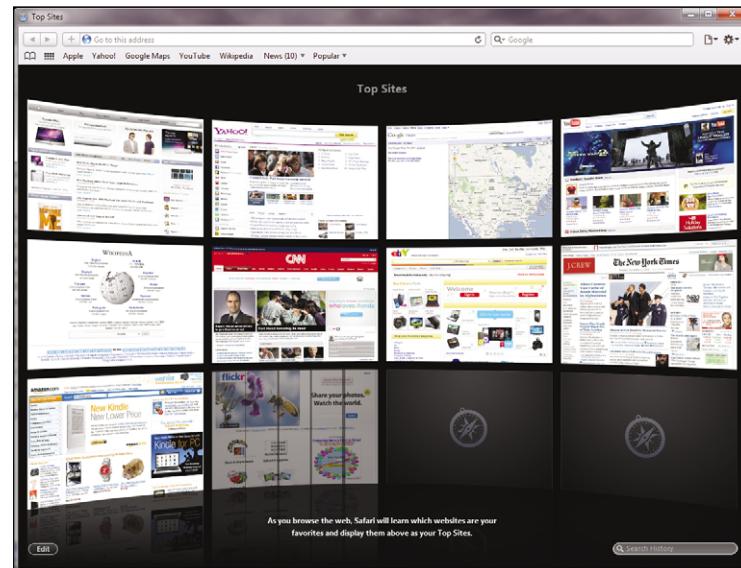
**With Safari's Downloads window, you not only get a quick glimpse of downloaded files, but you also can open downloaded files directly from this window.**

without the need to open the download folder. To open a file that appears in the Downloads window, simply right-click the file listing and click Open. You can also clear the file listing from this window by right-clicking the file and clicking Remove From List. To change how Safari stores items in this download list, select Edit, select Preferences, open the General tab, and click the Remove Download List Items drop-down menu. You can choose to have Safari remove download

list items Manually, When Safari Quits, or Upon Successful Download.

## Touring Top Sites

One of Safari's most unique and useful tools is Top Sites, which displays large thumbnails of all your favorite Web sites on one screen. Safari regularly updates these thumbnails to give you the content currently appearing on your most-visited Web sites. Top Sites gets you started with a default

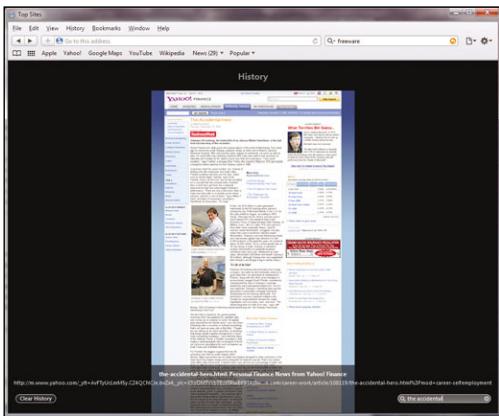


**Safari's Top Sites feature is very useful when you have a selection of regularly visited sites on which the content changes from day to day.**

selection of Web sites, including CNN, Yahoo!, Google Maps, YouTube, Wikipedia, and others, but it's easy to remove any of those or add new ones.

To access the Top Sites tool, click the Top Sites icon (a square collection of tiny boxes) near the top left of the browser. The thumbnails listed on this page automatically update to show the most recent content on each of the represented Web pages, and you can go directly to any of those pages by simply clicking any of the thumbnails. To edit your Top Sites, click the Edit button at the lower left of the window. For existing thumbnails, you can click the X icon that appears on a thumbnail to never include the page as a Top Site or click the push pin icon to mark the page as a permanent Top Site. To add a page to Top Sites, simply drag its URL to the Top Sites icon.

If you'd like Top Sites to be your start page when you open Safari, click Edit, select Preferences, open the General tab, and select Top Sites from the New Windows Open With drop-down menu. Alternately, you can instruct Safari to open new windows or tabs with your home page, an empty page, your bookmarks, or the same page as an existing window or tab. To set a home



page, browse to the page you'd like to designate as your home page and then open the General tab. Beside the Home Page entry, click Set To Current Page.

## Browsing History

Combined with its innate browsing speed, Safari's browsing tools help to make everyday Web navigation speedy and seamless. Both the Address Bar and Search field feature auto-complete technology that automatically completes typing with a Top Hit (that is, the most likely match) in the Address Bar and relevant searches (via Google Suggest) in the Search field. If the Top Hit in the Address Bar isn't the site you're trying to reach, you can select from a list of relevant suggestions that Safari pulls from your bookmarks and browsing history.

Safari's browsing history proves useful in other ways, as well. To see full-page previews of sites you previously visited, return to the Top Sites window and type a word in the Search History field at the bottom right of the screen. Safari will display the most relevant results from your browsing history in full-page, large thumbnail form, and you can scroll between these pages using the arrow buttons beneath the previews or by using your mouse's scroll wheel.

Similarly, you can review your site history and bookmarked sites using Cover Flow, which shows you full-page previews of sites in your history and bookmarks as they appeared when you last visited them. To use Cover Flow, click the Bookmarks button (it looks

**Simply enter a word in the Search History field, and Safari will find relevant previously visited sites.**

like an open book) in the upper-left section of the browser. On the left panel, click History or any of your bookmarks entries (such as Bookmarks Bar) to see the previews on the right pane. You can also use Safari's history to revisit all of the pages you had open the last time you used Safari. Click the History menu and click Reopen All Windows From Last Session. If you accidentally close a window and can't remember the URL for that page, simply click the History menu and click Reopen Last Closed Window.

Like other modern browsers, Safari makes use of tabs to consolidate your browser windows. If you end up opening multiple browser windows and wish everything was accessible from one window, just click the Window menu and click Merge All Windows.

## Get A Makeover

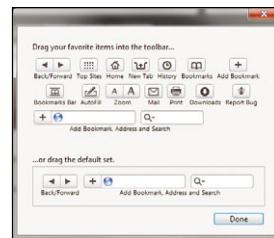
Safari's default layout is clean and sparse, but it's easy to customize the browser to mesh with your browsing requirements. To change the button layout, click View and then click Customize Toolbar to show a selection of various items you can place on the toolbar. Some of these buttons already appear in the default layout, but others—such as New Tab, Add Bookmark, Print, and others—don't appear in that layout but are nonetheless useful. To add a button, simply click and hold a button from the Customize Toolbar window and drag it to your desired location on the Safari toolbar. Likewise, to remove a button from the Safari toolbar, click and hold

it and drag it to the Customize Toolbar window.

## Stay Safe

Of course, Safari includes several security features that help keep your system clear of malware and protect you from phishing and other schemes. By default, Safari warns you when it detects a fraudulent Web site. However, you can turn this feature off (and back on) by clicking Edit, selecting Preferences, and opening the Security tab. Also on this tab, you can define the types of Web content you want Safari to enable or disable (such as Java and plug-ins), and you can also instruct Safari to accept cookies always, never, or only from sites you visit.

Another useful feature is private browsing, which won't store any history information, cookies, or anything else about your browsing session. Private browsing is particularly useful when using a shared computer so that other users can't check to see where you've been (for example, you won't give away your plans if you're shopping for birthday gifts). To turn Private Browsing on or off, click Edit, click Private Browsing, and click OK to confirm.



**Safari lets you drag buttons on or off of its Menu Bar.**

## When Trouble Strikes

Although Safari is a relatively stable browser, it's subject to common browser-related problems such as crashes, Web pages that don't appear as they should, Web pages that won't open, Java problems, and others. If you encounter trouble with your Safari browser, check Apple's Safari support page at [www.apple.com/support/safari](http://www.apple.com/support/safari). Here, you'll find both troubleshooting topics as well as extensive discussion forums. ■

BY CHRISTIAN PERRY

# Mozilla Thunderbird

## Explore A Flock Of New Features

**W**ith the release of Thunderbird 2, Mozilla tweaked its open-source email client and made it even more powerful. Improvements include better searching, email tagging (categorizing by identifiers such as Work, Personal, and To Do for ease of sorting), lots of customization options, and better junk and malicious mail identification.

These enhancements make for a good user experience, but they also provide a lot of features to explore. Thankfully, users can get around quite nimbly without having to learn any advanced functions. In this article, we'll walk you through Thunderbird 2 and show you how to use some of its most important features.

### Get Started

Installing Thunderbird is a cinch. After you download the executable file (just under 7MB) from [www.mozilla-messaging.com](http://www.mozilla-messaging.com), close all currently open programs. (Background operations, such as antivirus software, should be fine to leave running.) Next, locate the file on your system, double-click it, and accept the prompt for Setup to begin.

Once you accept the EULA (End-User License Agreement), Setup gives you the option of a Standard or Custom setup. Opt for Standard, and the installation will begin right away; go with Custom, and you can select from a few options, including where to store the files and whether to create Desktop icons. Even with the Custom option, there

are no advanced setup choices to wade through.

After you install Thunderbird, the wizard launches the program (unless you uncheck a box on the final Setup screen). Mozilla may then offer to import your Options, Account Settings, Address Book, and other data from another email client. If it cannot identify the correct files, it will automatically default to not importing anything and display an option for this, preselected.

You can import these later—and we recommend you wait, as it can take a long time, especially if you have a lot of stored emails or contacts. To import information after setup, select Import from the Tools menu and select which type of information to import. Start with Address Books and Settings, as these should be easy to import. (Thunderbird will import Outlook Address Books during the Mail import unless you have exported your Contacts in Outlook to a separate file. Refer to Outlook's Help menu to do this.)

### Take Off

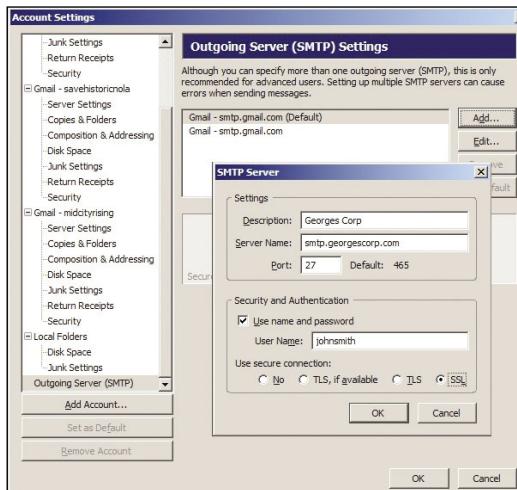
Thunderbird next offers to set up an email account for you and then receive undelivered messages. It can set up Gmail accounts for you, but to set up an account for any service other than Gmail, you'll need to know not only your email address and password, but also server-specific information. If you have a mail client, you can copy those settings. For example, in Windows Mail (the email client in Windows Vista), open the program and select Accounts



from the Tools menu. Click through all the General, Servers, Advanced, and IMAP tabs and write down anything you find. On the Servers tab under Outgoing Mail Server, if the My Server Requires Authentication box is checked, click Settings and write those down, as well. If you do not use Windows Mail, refer to your email (or Web mail) client's Help pages or check with your provider.

Thunderbird's email setup wizard only takes you as far as providing the account and server information, which for most accounts should be enough. If your email account doesn't work after setup, go to Tools and Account Settings to check the ports and other advanced settings against the defaults used by Thunderbird. Note that you can find other beneficial account tweaks here, but we will discuss these in the "Keep It Neat" section below.

From the Tools menu, select Account Settings. Under your email account, click Server Settings to check port settings. If your email service requires a secure connection with or without authentication (many Web mail services do), click the appropriate choices under Security Settings. Then, in the left pane, scroll down to and click Outgoing Server (SMTP), click the account, and click Edit. Provide



**Thunderbird can set up Gmail accounts for you, but for other providers, you may need to provide advanced information via the Account Settings interface.**

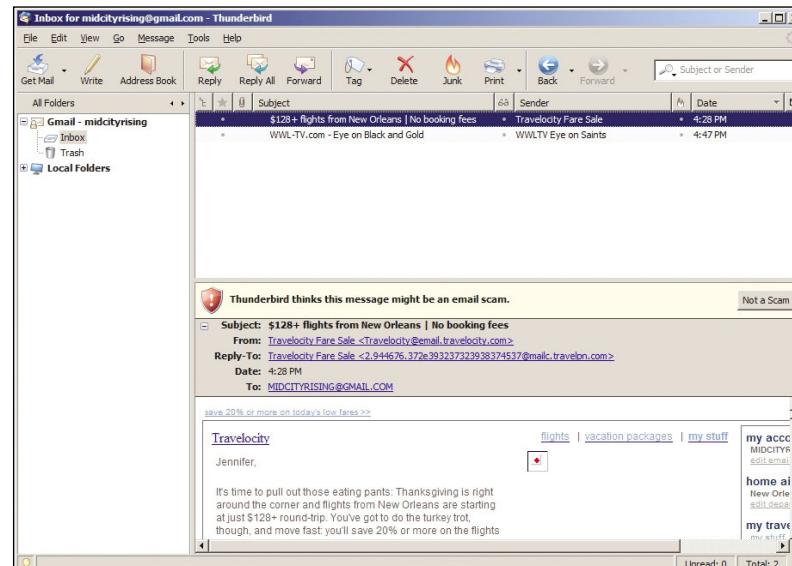
any additional information you have been given and then click OK.

### Explore Your Nest

Once Thunderbird is up and running, take a moment to acclimate yourself before diving into customizations and data import. The default interface looks like that of many email clients. At the top, beneath the standard menu bar, is the Mail Toolbar. Here are options for Get Mail, Write (compose new mail), Reply, Forward, and others. Buttons we really like are Tag (for assigning messages to specific categories) and Junk (for easily marking a message as junk mail).

Another good idea is the Back/Forward button combo, which sends you back to the message you just viewed or returns you to where you were. At the bottom is the Status Bar, which indicates quantities of unread mail and total mail as well as whether you are online.

Beneath the Mail Toolbar on the left is the folders pane, and on the right is the mail pane, with the email preview (Message Pane) beneath it. You can toggle the Message pane on and off by pressing F8. Between these two panes



If Thunderbird suspects a message might be from a scam artist, it will alert you with a warning below the message preview window.

is a warning pane that alerts you if Thunderbird thinks a message is a scam or if it has blocked images for your protection.

### Express Yourself

To compose a message, click the Write button. In the message composition interface, you'll see buttons for Send, Contacts, Spell, Attach, Security, and Save. Send, Attach, and Save do what you would expect them to. Security is for employing a digital signature (something you may never use). Clicking Contacts opens a new pane rather than a standalone window where you can search for or browse contacts to assign as recipients. This is a sensible approach, as you can write and search intermittently.

Clicking Spell brings up a display where you can check your text for errors; it is dimmed unless you type text (or merely click your mouse) within the message body. Thunderbird's spell checker lets you create personal dictionaries with specialized words. You can opt to have Thunderbird spell check as you type by selecting the Options menu within a new message. However, although Thunderbird underscores

misspelled words, it does not have an auto-correct feature. In addition, you'll find numerous advanced formatting and transmittal options on the Edit, Insert, Format, and Options menus.

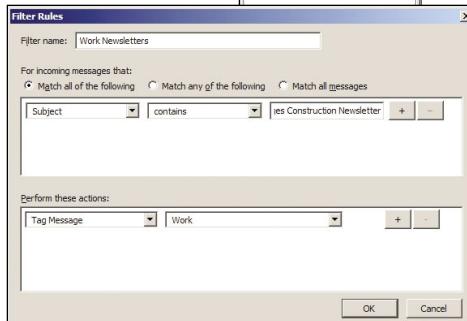
To specify recipients for your message, use the Contacts option mentioned above, click the address card icon to the right of To:, or type an address in the recipient display. If you have more than one account, you can also select the email address from which to send by clicking the down arrow to the right of the From: display. When you are ready to transmit the message, click Send.

### More Accounts, Please

To set up multiple email accounts, you'll use the Account Settings option. Open it and click Add Account. Thunderbird will walk you through the same wizard you saw at setup. However, by default, Thunderbird automatically places new accounts in the Local Folders directory, which means all mail will be delivered to the Local Folders inbox.

If you want your new account set up as a top-level account, which gives it a dedicated inbox and creates a separate mailbox file for the account,

**Thunderbird can alert you to misspelled words in your message, but it does not automatically correct them.**



**Thunderbird has a filter feature that lets you establish mail delivery rules, not only by sender, recipient, and keyword, but also by advanced options such as tags.**

unchecked the Use Global Inbox option during setup. For a second Gmail account to have its own inbox, you won't see this option. Instead, you'll change it after establishing the account.

If you receive a lot of messages, it's good to start out with specialized folders for different accounts, and possibly different senders or keywords. However, you can do this by creating specialized folders and rules that manage them within the Local Folders directory. You don't need to give accounts their own directories unless you want messages to be stored in a file separate from other messages (handy for backups or taking the file elsewhere). We like the neat appearance of having each account in its own directory, but that's just our preference. We discuss the options for folder organization in the next section.

### Keep It Neat

To ensure good organization, establish folder preferences, mail tags, and rules right away. Thunderbird automatically creates Inbox and Trash

folders for each email directory, plus Unsent (drafts) and Sent folders in the local directory. You can create more main folders within a top-level account by right-clicking the account name in the folders pane and selecting New Folder. Right-click an existing folder, and you can create a new subfolder.

More tweaks (including adding ports or giving a second Gmail account its own directory) are available in Account Settings. Open it and select an account in the left pane. Click Server Settings to determine how often mail is checked, whether deleted mail is emptied upon exit, and whether you want to see headers only. You can also change the storage location of a mail file. To change a delivery path, click Advanced. To determine where sent mail, drafts, and templates are stored, click Copies & Folders.

To manage junk mail options for the account, click Junk Settings. Don't uncheck Enable Adaptive Junk Mail Controls For This Account unless you already use another junk mail manager. You will also need to train Thunderbird to recognize junk mail by clicking the Junk button when a selected message fits the criteria. (You can also find these options on the Message menu under Mark.)

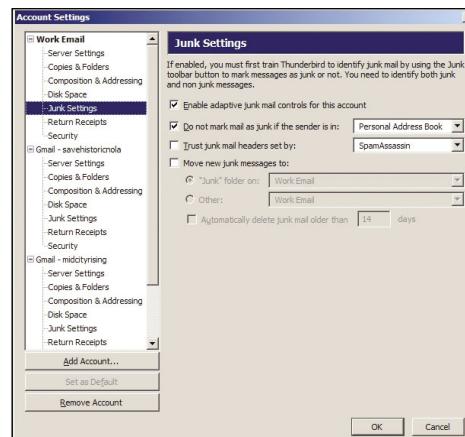
To create more tags for your emails (do this before you create rules), select

Options from the Tools menu, click the Display button, and click the Tags tab. A variety of tags gives you plenty of ways to categorize your emails, and messages can have multiple tags. You can always add more later, but you can only make rules for tags you've already created. (You can also tag messages directly using the Tag button, but we love tagging them via rules.)

To create rule filters, select an email, click the Message menu, and select Create Filter From Message. You can also select Message Filters from the Tools menu. Thunderbird lets you create rule filters using a variety of criteria, although the feature is not as extensive as Microsoft Outlook's.

### Fly Away

These explanations and instructions only scratch the surface of Thunderbird's functionality. As you master the basics, stretch your wings a bit. Explore the options on the menu bar,



**Thunderbird doesn't offer pre-established junk mail levels such as high, medium, or low; it works best if you train it to recognize junk.**

give Account Settings a thorough review, and note the many options available on drop-down menus when you right-click something. You'll be glad you did. ■

BY JENNIFER FARWELL

# Stairway To Seven

**H**appy New Year! And what better way to start out the New Year than with a new operating system? Well, OK, who am I kidding? I'd rather be sipping champagne. Celebratory bubbly notwithstanding, unless you have been living in a bunker, you probably know that Windows 7 is now a reality, having been released on Oct. 22. I tested two beta versions and was fairly impressed, as I shared with you in my June 2009 column. Now that I'm using the commercial release, thumbs up and kudos to Microsoft for redeeming itself after the V-word debacle.

I still have Windows Vista on one of my systems, but I have a feeling it's going to be quickly abandoned and relegated to Microsoft's "Hall of Shame" along with Bob, Windows ME, and the Windows 95 upgrade that arrived on a staggering 30 floppies. (Why the floppies were staggering is unknown. I suspect too much champagne.)

If you're contemplating a move to Win7, or perhaps you have already taken the plunge, here are a few of my favorite starter tips and tricks, with many more to come in the months ahead, I promise!

Press WIN (the Windows Logo key)-Spacebar to make all open windows transparent. Technically, this is called the Preview Desktop function, but it sounds so much more mysterious and intriguing to say that it makes all open windows transparent. The windows only remain transparent as long as you hold down the Windows key.

The Quick Launch bar is but a distant memory in Win7. In its place is the ability to pin FUPs (Frequently Used Programs), folders, and documents to the Taskbar or Start menu. To do this, click Start and All Programs. Right-click a program or other item and select Pin To Taskbar or Pin To Start Menu.

Win7 arrives with a nifty—dare I say groovy—assortment of new wallpaper. If you can't decide which one to select, you can pick a few and let Windows display them in a Desktop slideshow. Think of it as Microsoft's "Festival of Wallpapers." Right-click the Desktop and select Personalize and Desktop Background. Then hold the CTRL key down and click to select multiple backgrounds. Choose the frequency with which you would like the images to change from the Change Picture Every drop-down list (anything from once a day to once every 10 seconds, which is fun in a splitting-headache kind of way), or select Shuffle if you would like

the backgrounds to appear in random order, then click Save Changes.

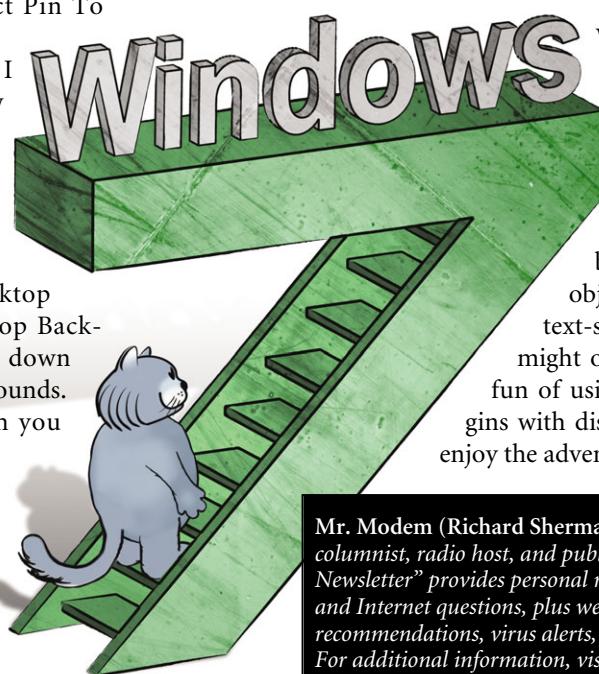
You can maximize a window by dragging it to the top of the screen. Also, to use a feature called Aero Shake, click the top of an open window and start shaking the window by wiggling your mouse. Seriously. That will cause any other open windows to minimize to the Taskbar. You can restore them to their full and upright positions by shaking the top of the window again.

As long as we're dragging and shaking—which is, coincidentally, how Mrs. Modem describes my dancing prowess—if you drag one window to the left side of the screen and another to the right, the windows will instantly resize, each filling half the screen, so you can easily compare them. Love it!

The Run command is buried under the Accessories menu, which requires an exhaustive series of clicks to access. Who has the energy? To add it to the Start menu for convenient one-click access, right-click Start and select Properties. From the window that appears, click the Start Menu tab, followed by Customize. Click to select the Run Command checkbox followed by OK, OK. OK? You can also display the Run dialog box by pressing WIN-R.

When I use Windows Explorer, I prefer to see all folders on my system, not just Win7's five default locations (Favorites, Libraries, HomeGroup, Computer, and Network). To view all folders, launch Windows Explorer by clicking Start, typing Windows Explorer in the search field, and pressing ENTER; click Organize; choose Folder And Search Options; and select the General tab. Then checkmark Show All folders and click OK.

My best overall suggestion for Win7, however, is to right-click anything and everything. On its face, Win7 resembles Vista—but don't hold that against it. Despite the familial resemblance, if you right-click the Desktop, Taskbar, gadgets, icons, and other objects, you'll find some new context-sensitive menus and features that might otherwise escape your view. The fun of using a new operating system begins with discovering its hidden goodies, so enjoy the adventure and happy exploring! ■



Mr. Modem (Richard Sherman) is an author, syndicated columnist, radio host, and publisher. "Mr. Modem's Weekly Newsletter" provides personal responses to subscribers' computer and Internet questions, plus weekly computing tips, Web site recommendations, virus alerts, hoax warnings, and more. For additional information, visit [www.MrModem.com](http://www.MrModem.com).

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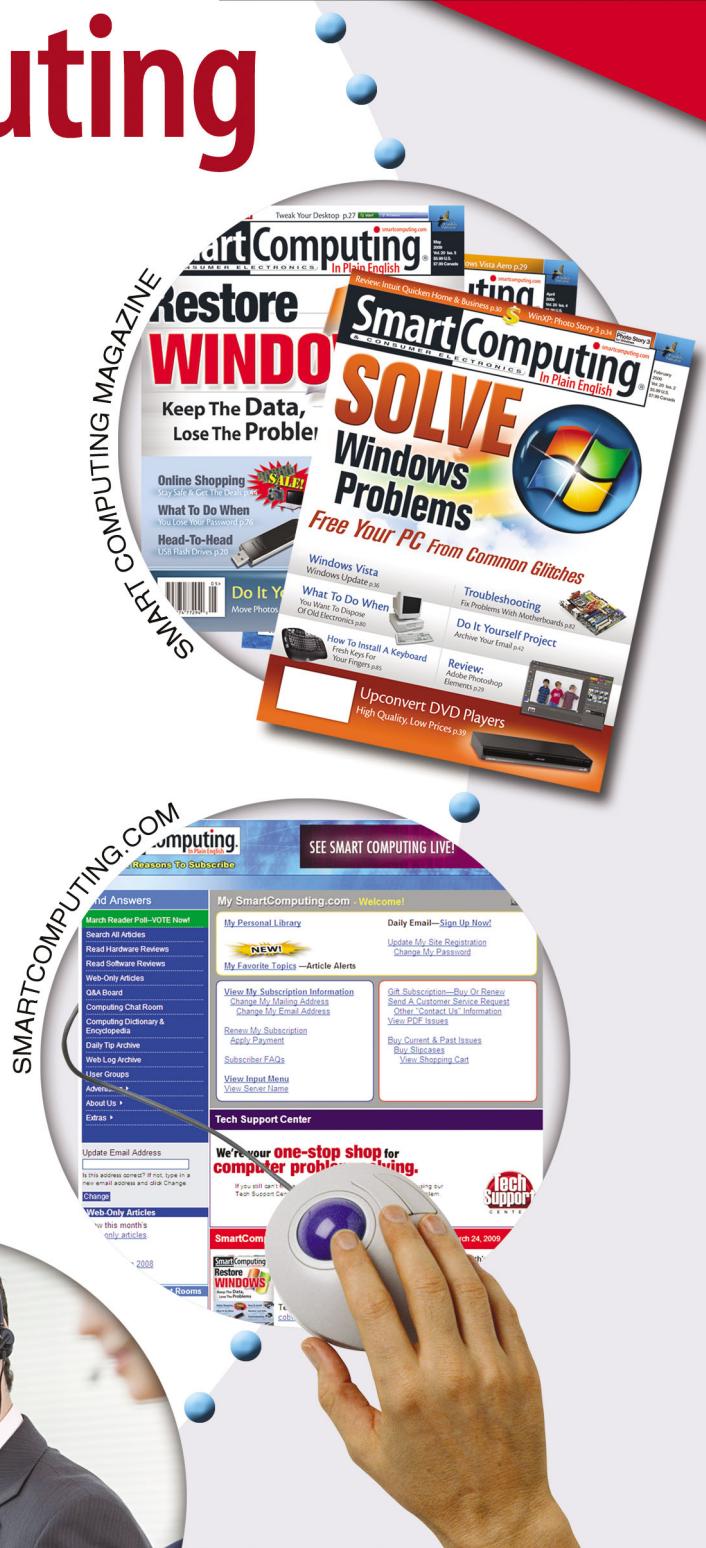
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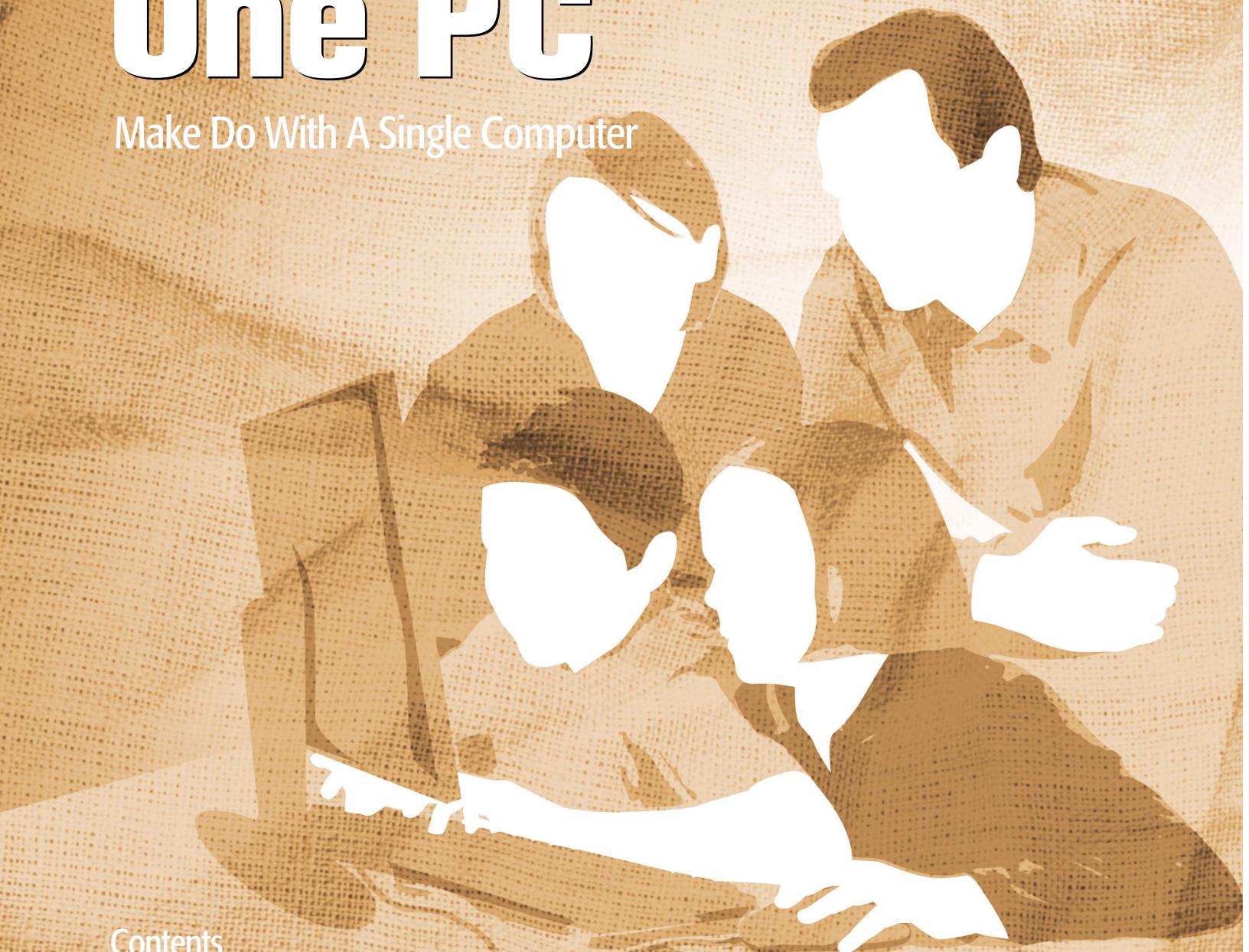


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# One Family, One PC

Make Do With A Single Computer



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Tips On Buying A New Multiuser PC

**M**any, if not most, of us have cut back on spending lately. This is especially true for those of us who are retired, approaching retirement, underemployed, or between jobs.

One of the varied effects of this new era of frugality is the resurgence of the one-PC household. Even in this age of bargain desktops and inexpensive netbooks (low-powered notebooks primarily intended to run Web-based applications), many families are sticking with—or returning to—the concept of a single computer that all members share. These days, even a low price can't keep a secondary PC from seeming a bit extravagant.

As with the purchase of a new car, a new computer makes some buyers feel that it's time to get rid of their old one. After all, we now have Web access from alternative devices such as cell phones and game consoles, albeit in a more limited form that's generally harder to navigate than with a trusty mouse.

Some of us sell our old PCs to recoup some of the cost of buying our new ones. Others hand down those old systems to relatives, perhaps in trade for other items, or donate them to the needy for altruistic and/or tax purposes. If you have just one computer under your roof, you can save additional money on typically per-PC costs such as antivirus subscriptions and OS (operating system) upgrades. Speaking of savings, if you're a desktop user, having just one computer desk saves physical space in your house.

Of course, there are plenty of obvious reasons to have more than one PC around. Like TVs and cars, multiple systems can cut down on arguments that begin with "You're always using it!" Because computers are so very versatile, being different things to different family members, someone who spends more than their share of time on Facebook ([www.facebook.com](http://www.facebook.com)), using Skype ([www.skype.com](http://www.skype.com)), or playing World of Warcraft can disrupt the harmony of the household.

And then there are academic assignments. If you have school-aged kids, it may not be overly practical to expect them to share a single computer with everyone else.

There are other concerns, too. With a shared PC, it's pretty common for the hard drive to quickly grow cluttered with video, photos, and music files. Multiple users also make a computer more likely to contract malware for a variety of reasons. And when the family computer goes down, that means the entire household might be disconnected from online

resources. Finally, everyone will need to agree to set aside time for backups, antivirus scans, and other computer maintenance.

### Multiplicity

Should you be willing to make a go of it with a single PC, we're here to help. The following articles will help you maximize the benefits of a shared system while minimizing some of its drawbacks.

"Not Everyone's An Admin" on page 56 tells you how to "split" your Windows PC into separate accounts for each user. User Accounts let each family member specify her own Desktops, wallpaper, (My) Documents folder, and so on.

On page 59, "Windows Security & Privacy" can help you address the security and privacy issues of a shared system. From malware avoidance to data encryption, there are important points to ponder.

As a parent, you may want to take advantage of technologies to limit the Web sites a younger member of the family can visit, the amount of time he can play games, and so on. "The Power To Protect" discusses the parental control options at your disposal.

"Maintain The Family PC" on page 65 talks about upkeep on your family PC, and its hard drive in par-

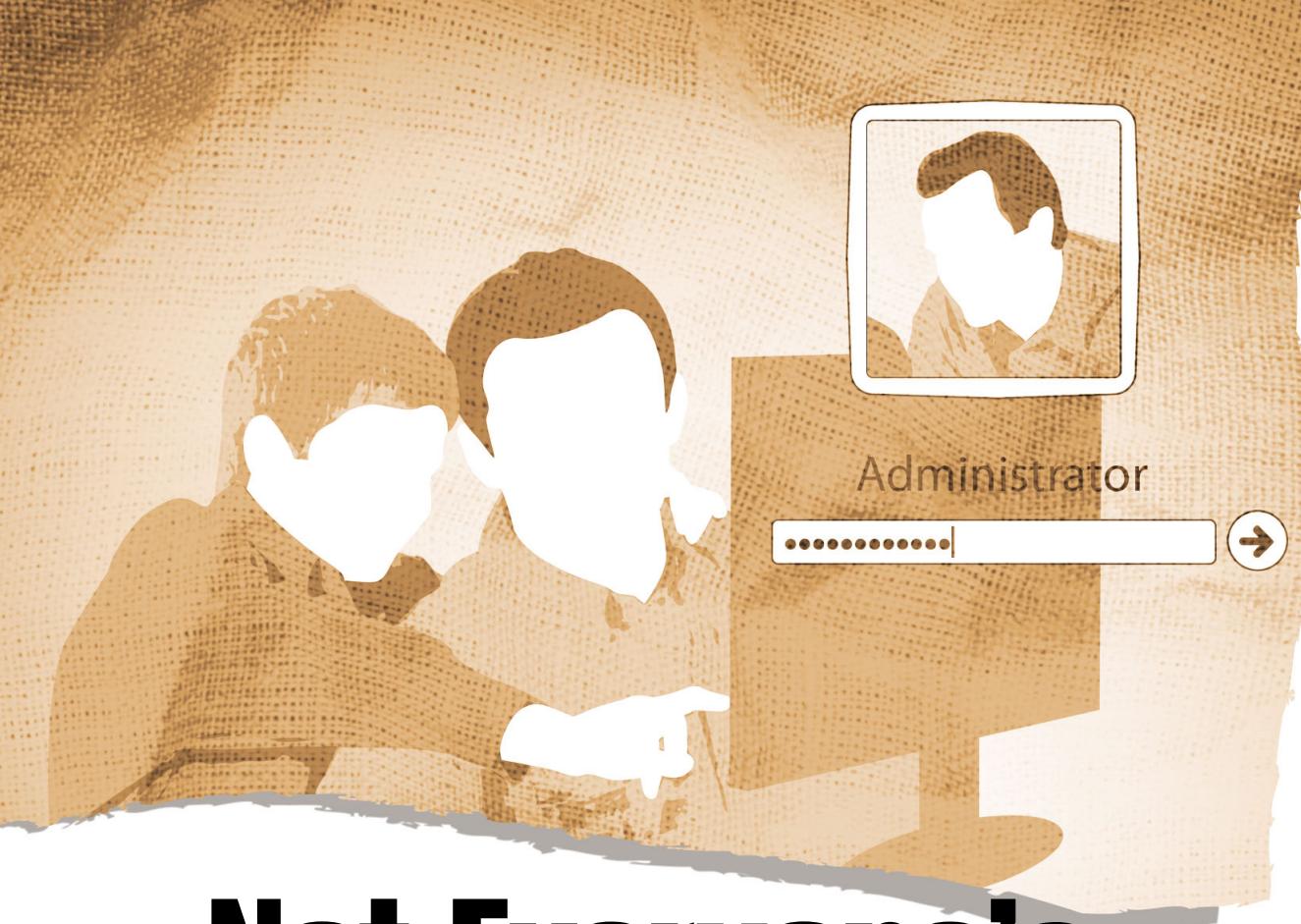
**As with the purchase of a new car, a new computer makes some buyers feel that it's time to get rid of their old one.**

ticular. Defragmenting the hard drive and deleting junk files can keep a communal computer running like new.

And finally, when you've decided that it would cost more to address your family's evolving needs with hardware upgrades than it would to simply buy a new PC, "When Your Computer Loses That Vintage Appeal" on page 68 helps you approach the process in a smart way.

Unless your family resembles the Bradfords on "Eight Is Enough" or the Duggars on "18 Kids And Counting," it is entirely likely that you can make a shared PC work for everyone. All it takes is a little consideration, a bit of upkeep, and, of course, *Smart Computing*. ■

BY MARTY SEMS



# Not Everyone's An Admin

## User Accounts Make Your System Safer

**L**et there be spaces in your togetherness,” wrote Khalil Gibran. This should be the motto for Windows user accounts. On any Windows system shared by multiple people, there are bound to be differences in personal preferences. Mom has her own set of browser Favorites and doesn’t want Dad’s hunting trip as her Windows wallpaper. Teenaged Susie wants her documents kept private, and younger brother Johnny needs certain limits put on his Web browsing.

User accounts help manage everyone’s unique needs without any need to purchase additional software. Whether you’re using Windows XP, Vista, or Win7, the setup and management of user accounts is fairly straightforward, albeit with a twist or two along the way.

### Kinds Of User Accounts

Regardless of the Windows version you’re using, a user account is a collection of rights, settings, and configuration information. When you create a new user account

and log in to it for the first time, it looks something like a freshly installed copy of Windows. The background, color scheme, and other personalization settings will all be Windows’ defaults. The applications installed under the primary user account will still be present in other accounts, although, as you’ll see in the “Installing Software” sidebar, not all programs may be allowed to run.

There are three kinds of user accounts—Administrator, Standard (called Limited in WinXP), and Guest—and each carries different rights on the computer. Many experienced users simply use an Administrator account because it has full access and privileges to everything in Windows, but this isn’t always the state in which it makes the most sense to run the PC. In the course of regular use, we tend to relax our habits, and after weeks of not having a problem with walking away from a system running under an Administrator account, that’s just when the wrong person will sit down and wreak havoc. It’s safer to run a Standard account and invoke Administrator privileges only when needed.

An Administrator account has global control, meaning that it can make changes to any and all accounts on the system. More importantly, Administrators can install any software, access any file on the system, and make security changes. By necessity, the first account created in Windows has Administrator rights.

Standard accounts look and feel like Administrator accounts, but there are a few things they can't do. Most applications will run without issue unless they

you're logged in to an Administrator account. Then, in Vista and Win7, click Start and Control Panel and choose Add Or Remove User Accounts under User Accounts And Family Safety. Click Create A New Account. Choose a name for the account and whether you want it to be a Standard User or Administrator account and click Create Account. If you should need to delete an account later, choose the account in the Manage Account window and click Delete The Account. You'll see

WinXP, click Change An Account in the User Accounts window, select an account, and click Delete The Account.

## Picking Pictures

When you click the Start button, you see an icon in the top corner of the Start menu. This is the picture associated with the active user account. When you first installed Windows, you were prompted to select a picture for the Administrator account. Now that

you've presumably gotten comfortable with your Windows configuration, you might want to pick a picture that's a little more "you." To do so in Vista or Win7, select Change Your Picture in the User Accounts area in the Control Panel. This will bring up the account name and picture under which is a grid of additional pictures. If one catches your fancy, click it and then click the Change Picture button. If nothing pleases, click the Browse For More Pictures link. This will spawn an Open dialog box. Simply browse around your system until you find the image you want. You might be surprised at how intelligent Windows is about cropping images to get the best possible shot for your icon.

In Vista or Win7, click Start, Control Panel, User Accounts, and Create An Account. Choose a name for the account and click Next. Choose Computer Administrator or Limited and click Create Account. To delete an account in



**A Standard user account, called Limited in WinXP, acts like an Administrator account with only some restricted system privileges.**

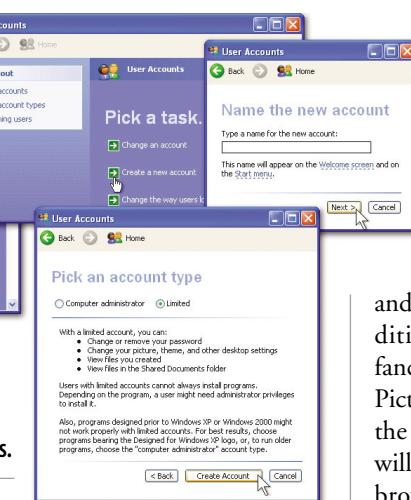
were specifically installed for a single account. A Standard account can't delete system files (another reason to stay out of Administrator mode), make changes that affect other user accounts, or install or uninstall applications.

The Guest account is much like a Standard account, but Guest users can't create passwords or change Windows settings. Windows comes with a Guest account already created but disabled. To enable it in Vista and Win7, go to Control Panel, User Accounts And Family Safety, User Accounts, and Manage Another Account. Click the Guest account icon and click the Turn On button.

In WinXP, open the Control Panel and then click User Accounts, Change An Account, the Guest icon, and the Turn On The Guest Account button.

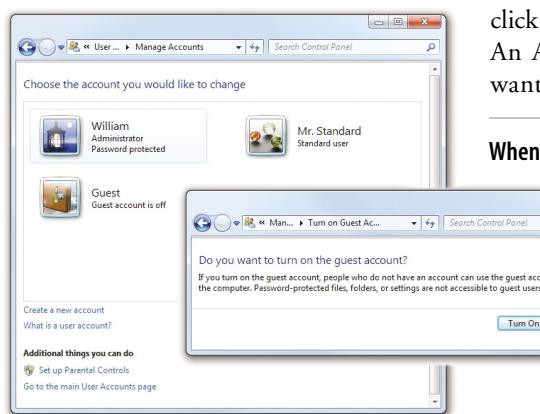
## Set Up A New Account

Creating accounts for each member of your family is simple. First make sure



an option to save the files from the account. Choose either Delete Files or Keep Files. Finally, confirm the deletion by clicking the Delete Account button.

In WinXP, click Start, Control Panel, User Accounts, and Create An Account. Choose a name for the account and click Next. Choose Computer Administrator or Limited and click Create Account. To delete an account in



**When you want to make your PC available to visitors but not give them rights to see any private files or modify system settings, use the Guest account.**

select the Change The/My Picture link. Again, you can select from WinXP's stock images or click Browse For More Pictures. When you have the image you want selected, click Change Picture.

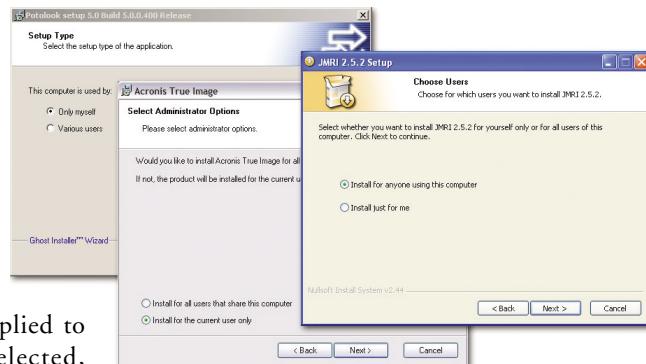
## Pick A Password

As you might have noticed along the way, the links for changing an account password are given right alongside those for changing pictures. In WinXP, for instance, the Change The Password link appears two lines above the Change The Picture link. Now, it's possible that accounts were created without any password. Microsoft discourages this, correctly urging people to increase their privacy and security through the use of passwords. Of course, once a password is applied, it becomes the user's and/or administrator's responsibility to remember those passwords. If the passwords are written down, be sure to keep them in a safe place away from the PC—definitely *not* under the keyboard. There's no point in having security if it isn't actually secure.

**When installing software, you will often be asked whether only the current or all users will be able to use the program.**

If there is no password already applied to the account you selected, you'll see a Create A Password link in the Change An Account (User Accounts in WinXP) screen. In all three current Windows versions, the Create Password screen offers the same three input fields: one for the new password, one to confirm the new password, and one for a password hint. Fill out the fields and click Create Password.

Once a password has been given to an account, the Create link gets replaced by a Change The Password option. This is pretty self-explanatory, as is the Remove The Password link. More importantly, you may be prompted to decide whether users in other accounts will still have the



ability to see your documents. Clicking the Yes, Make Private button will lock the contents of your folders. Note that while an Administrator account can modify passwords for any account, a Limited or Standard account can only modify its own password.

While making changes to passwords, you may see a warning that these changes will erase all EFS-encrypted files, personal certificates, and stored passwords for Web sites and network resources. Because most consumers don't use the encryption capabilities in Windows, the first item probably isn't much of a concern; the last two will be nuisances because all of those passwords will have to be re-entered and saved again.

## Installing Software

Often, when you install a program in Windows, the installation routine will ask if you want to install the program for the current user or all users. The exact wording of this question can vary. You might see it asked as "just for me" or "anyone using this computer." The question is basically asking if the rights to run this application should be granted to the currently active account or all accounts on the system.

Many users make a habit of selecting all accounts, but be careful with this. If you have a game with graphic violence, you may not want your 6-year-old having rights to load that application on his own account. Most software today is still licensed to a given system, not a specific user account. You could install for the current user, and if another user needs the same application, simply install the program again while logged in to that user's account.

Some software defaults to installing for all users and doesn't offer a choice. The same is also true for apps that default to only installing for the current user. Your specific program may offer ways around this limitation.

Once an application's all/current status is established, modifying this can be difficult. The simplest solution may be to simply uninstall and then reinstall the program. This might necessitate temporarily granting a Limited/Standard account Administrator rights, then switching over and logging into that account, installing the application within the account (into the same folder in which it is already installed) using the desired permissions, switching back to the regular Administrator account, and changing the other account's rights back to Limited/Standard. Usually, this will fix matters. ■

## Parental Controls

Setting up User Accounts lets you control computer usage according to each user's needs. In Vista and Win7, you have the ability to set up Parental Controls on a Standard account to block access to certain programs and games as well as control when kids can use the PC. From the Manage Accounts screen, click the Set Up Parental Controls link and select which Standard account you want to apply these controls to. After a moment, you'll see the User Controls screen appear. Begin by changing the Parental Controls option from Off to On, Enforce Current Settings, and then enable any settings. For more details on Parental Controls and other ways to limit certain users, see "The Power To Protect" on page 62. ■

BY WILLIAM VAN WINKLE



# Windows Security & Privacy

## Set Up Multiple Lines Of Defense

**B**uying a computer these days means you're signing on to be a network administrator, as well. You can't afford to let your computer connect to the Internet for one second without having at least some protection installed or at least some idea of where to go first to get that protection. Worse, there is no silver bullet that you can install to protect your PC from all threats. Security is about adding layers of protection, and you are the one who must configure and maintain each layer.

Ready for some good news? The software available to secure your computer and protect your privacy is easier to work with than ever, and many of the best products are either available free or already come with Windows. All you need is a little knowledge of what precautions to take, along with some tips on configuring your security and privacy software.

Before you use any of the security tips in this article, be sure to read "Not Everyone's An Admin" on page 56 to learn about setting up user accounts. Your goal is to have nobody, including yourself, running Windows as

an Administrator at all times because a lot of malware can't touch your PC at all if it doesn't have Administrator privileges.

### Enable UAC

One of the first things some Windows Vista and Windows 7 users do after running Windows for the first time is disable UAC (User Account Control). Big mistake. Although it is annoying to put up with, UAC is only being obtrusive for your own good. It is designed to prevent programs from automatically executing on your computer without your express permission, and most of the nastiest malware installs itself by doing the very thing UAC prevents. Turn it on and leave it on.

To turn UAC back on, click the Start menu and click your user picture in the upper-right corner. In Win7, click Change User Account Control Settings and use the slider to change it from Never Notify to one of the other settings. We recommend moving it two notches

up to Default, but for maximum security, move it all the way to the top setting of Always Notify. In Vista, click Turn User Account Control On Or Off, checkmark the Use User Account Control (UAC) To Help Protect Your Computer box, and click OK.

## Web Filtering

One of the best ways to keep malicious Web sites from delivering their payload onto the computer's hard drive is to set things up so nobody can access those sites in the first place. This is accomplished via filters that maintain a list of known malware sites and monitor your Internet connection to see if the computer is trying to access those sites, stopping those requests before they ever reach their destinations.

One such filtering product is OpenDNS ([www.opendns.com](http://www.opendns.com)). DNS stands for Domain Name System, and there are DNS servers scattered all over the Internet that convert the Web site addresses you type into IP (Internet Protocol) numbers that computers understand. For example, when you type [www.smartcomputing.com](http://www.smartcomputing.com) into a browser window and press ENTER, that information, called a URL (uniform resource locator) is forwarded to a DNS server. The server looks up [www.smartcomputing.com](http://www.smartcomputing.com) in its database and finds out what IP address is assigned to that particular Web site. Your Web browser then connects to that IP address, and the site loads in your browser. It's kind of like calling an operator when you only know someone's name (the URL), and then the operator (the DNS server) dials their phone number for you.

OpenDNS bypasses the DNS servers your computer normally connects to and lets you use theirs. OpenDNS automatically filters an enormous list of malicious Web sites by default. If your computer tries to connect to one of

those sites after OpenDNS is enabled, your Web browser will act as if the site doesn't even exist. There are additional filtering options as well that let you disable entire categories of sites that host things such as illegal content. All this, and the service is free.

The best way to take advantage of OpenDNS is to enable it on your home network's router. That way, every device that connects to your home network is protected automatically without having to set up the service individually on each machine.



**Never disable UAC, no matter how annoying it seems.**

There are detailed instructions for doing this with many routers at the OpenDNS Web site.

## Anti-Everything

At bare minimum, you need one first-class antivirus program installed on your computer and at least one antispyware program installed. You can install multiple antispyware programs if you wish, but never install more than one antivirus program or they will conflict.

For years, Microsoft left antivirus and anti-malware chores up to third-party vendors, but during the development of Windows 7, they implemented Microsoft Security Essentials (free; [www.microsoft.com/Security\\_Essentials](http://www.microsoft.com/Security_Essentials)). This is a one-stop shop for antivirus and antispyware that works unobtrusively without stealing a lot of resources from other Windows applications, and is highly recommended. It works with Windows XP, Vista, and Win7.

Download the program by going to [www.microsoft.com/Security\\_Essentials](http://www.microsoft.com/Security_Essentials) and clicking the Download Now

button. Setting up the software is a breeze. Find the icon in the Windows System Tray and double-click it to open the main interface. The Home tab lets you run manual scans for viruses and spyware, but it is best to have the software do this automatically at a time you set. Click the Settings tab and click Scheduled Scan on the left. Make sure the Run A Scheduled Scan On My Computer box is checked and use the drop-down boxes to choose a time. Quick Scan should suffice, but if you want to really make certain everything is rooted out, select Full Scan, which takes longer. Make sure the other two checkboxes are checked and click Save Changes to enable the automatic scan.

Next, click Real-time Protection on the left and make sure every box in that panel is checked. This will make sure your computer is protected from malicious Web sites and scan everything you download to make sure it isn't infected. Click Save Changes.

Finally, click Advanced on the left and make sure all the boxes in that pane are checked before clicking Save Changes. These options make sure everything on the computer is scanned, including compressed files (such as .ZIP files) and removable USB drives. We recommend leaving all of the other Microsoft Security Essentials settings at their defaults.

You also should make sure Windows Firewall is turned on, if you're not using a third-party firewall. This tool inspects all data on your Internet connection to make sure it's authorized to enter or exit. In WinXP, click Start, click Control Panel, and click Security Center. If Firewall is labeled On, leave it alone. If it is off, click Recommendations and click Enable Now before clicking Close and OK.

In Vista, click the Start button, click Control Panel, and click Security. Click Windows Firewall, click Turn Windows Firewall On Or Off, and click On before clicking OK.

In Win7, click the Start menu, click Control Panel, and click System And Security. Click Windows Firewall, click Turn Windows Firewall On Or Off, and choose Turn On Windows Firewall (in both locations) before clicking OK.

## Embrace Encryption

Much of your data would be of little interest to criminals, but passwords, financial info, and the like are a different story. You don't want to leave those exposed, and encryption is the best way to keep it all private.

Encryption scrambles data so that even if someone gains access to it, they need an alphanumeric key to unscramble it. The longer the key, the better-protected your data is, and there are also various types of encryption from which to choose that offer varying levels of security.

One solid encryption software option is TrueCrypt (free; [www.truecrypt.org](http://www.truecrypt.org)). It works with WinXP, Vista, and Win7 and lets you set up a virtual hard drive on your computer that is always encrypted. For example, if you have a computer with a 500GB (gigabyte) hard drive, you can have TrueCrypt permanently set aside 5GB (or any other amount of space) as an encrypted virtual drive, and anything you store there is automatically encrypted.

Here's how it works: Download the installation file and then double-click it to begin the installation. Accept the license terms, make sure the Install radio button is selected, and click Next. Leave all the checkboxes checked and click Install. Click Yes if you want to read the tutorial. Otherwise, click No and click Finish.

Double-click the TrueCrypt icon that appeared on your Desktop and click Create Volume. There are many options here you can explore later, but for now select the Create An Encrypted

File Container radio button and click Next. Select the Standard TrueCrypt Volume radio button and click Next.

On the Volume Location screen, click Select File but do not click a file in the Windows Explorer pane that appears. If you do, TrueCrypt will convert that file into an encrypted volume, deleting its original contents. Instead, select a folder

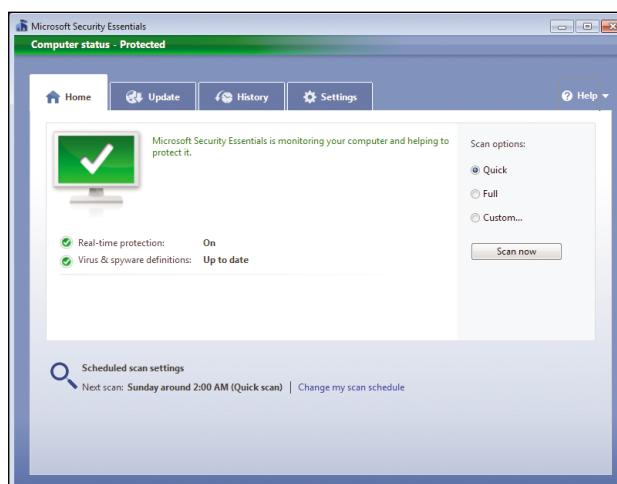
access to the encrypted volume. TrueCrypt doesn't email forgotten passwords. Click Next, and if you see a message asking if you plan to store files larger than 4GB, choose Yes or No based on your preferences and click Next.

Choose NTFS for the file system, if it's available, leave the Cluster on Default, and move your mouse around

the screen to help create a strong encryption key before clicking Format. The volume may take a long time to format depending on its size and your computer's speed.

Now when you open TrueCrypt, you can select a drive letter, click Select File, navigate to the volume you just created, and click Mount. Type your password and click OK. Now the volume will appear as a separate hard drive when you click the Start menu and Computer. You can use it the same way you would use any other drive on your computer, with the only difference being

that the files in the TrueCrypt drive are automatically encrypted. When you go into TrueCrypt and click Dismount All, nobody will be able to access the contents of the encrypted volume without mounting it again and supplying the proper password.



**Microsoft Security Essentials** is a fast, free way to secure your computer.

where you want to store the TrueCrypt volume, type a new name in the File Name field, and click Save. Make sure the Never Save History box is checked and click Next. There are a number of encryption algorithms to choose from on the next screen, but the default settings of AES and RIPEMD-160 offer a terrific combination of security and performance, so leave them alone and click Next.

Now it's time to choose a size for the file. The free space on your drive is listed, and if you have a few gigabytes to spare, click the GB radio button and type 2 in the box. That should be plenty of room for documents, but if you want to encrypt a lot of pictures or video, which consume a lot of storage space, consider reserving more space. You can always create another volume later if you need more room. Click Next and type a password. Some tips are provided in the window, and keep in mind that if you ever forget the password you are about to use, you will permanently lose

## Lockdown

The main problem with sharing a computer is that you never know what someone else has done on the machine or what Web sites they visited. This article has focused mainly on protecting the PC from outside attacks, but users messing things up from within is also a big threat. When you're finished applying the tips in this article, be sure to read "The Power To Protect" on page 62 regarding establishing Parental Controls that can help protect users from themselves and keep your precious data intact. ■

BY TRACY BAKER



# The Power To Protect

## Parental Controls Lock Down Your PC

The Internet hasn't been around for all that long, and yet we sometimes take it for granted. The Web, for instance, is more than social networking sites and sports scores. Children today have access to one of the greatest teaching resources ever constructed, and they can access it from their own bedrooms. Of course, the Internet has a dark side, too. Parental controls are one tool available to help parents protect their children online. From the rudimentary parental controls included in Windows XP to the more sophisticated controls in Windows Vista and 7, we'll show you how Windows can help keep your children safe.

### Prerequisites

Today, most parental controls are based on individual user accounts. This is handy when multiple family members are sharing a single PC. Parents can have unfettered access, while teens can enjoy more freedom than younger children. This means that

before you can begin using parental controls, you need to make sure you have multiple accounts set up for each family member.

Regardless of whether you're using WinXP, Vista, or Win7, you'll have at least one account created by default. This is an administrator account, and users logged in to this account have complete access to the system. Your first step should be to password-protect this account. In WinXP, open the Control Panel, click User Accounts, click Change An Account, select the administrator account, and click Create A Password. In Vista, click User Accounts And Family Safety in the Control Panel, click Change Your Windows Password, and choose Create A Password For Your Account. If you're using Win7, click User Accounts And Family Safety in the Control Panel and then click User Accounts. Click Create A Password For Your Account. It goes without saying that the password shouldn't be something that your child can guess. For more information about setting up and configuring user

accounts, see “Not Everyone’s An Admin” on page 56.

## Web Filtering

Content Advisor is a component that is integrated with Internet Explorer and really the only parental control included in WinXP. Unfortunately, we found it to be of limited usefulness. In theory, Content Advisor lets you block Web sites that contain content in certain categories (such as drug use). Unfortunately, most sites are not rated and, as a result, blocked by default. You can add sites to an Approved list, but a better option for WinXP users is Microsoft’s Family Safety, which is part of Windows Live and discussed later in this article.

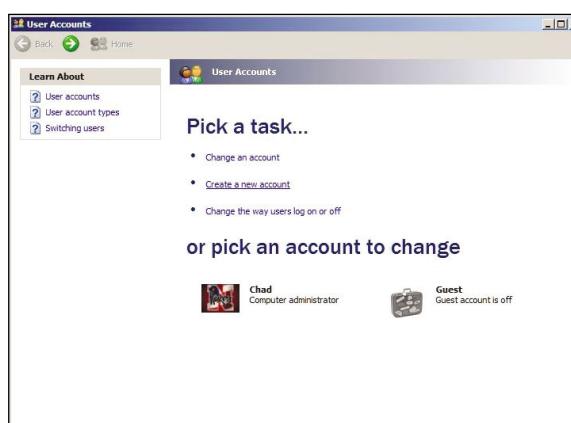
**Vista integration.** In Vista, Microsoft included an integrated Web filter. Unlike Content Advisor, this filter works with third-party browsers such as Firefox and Google’s Chrome. To enable Web filtering in Vista, open the Control Panel and click Set Up Parental Controls For Any User under User Accounts And Family Safety. Select the appropriate user account and select On, Enforce Current Settings. Now you can click Windows Vista Web Filter.

The Vista filter gives you two main options. You can either select Block Some Websites Or Content or Allow All Websites And Content. If you choose to block some content, you can select High, Medium (the default), None, or Custom under Block Web Content Automatically. We recommend you place a check next to Block File Downloads at the bottom of this window to prevent children from downloading potentially malicious software such as viruses and Trojan Horses.

You can also opt to always block or always allow specific Web sites by clicking Edit The Allow And Block List, entering a URL (uniform resource locator) in the Website Address box, and clicking the Allow or Block

button. If you’re not comfortable letting the Web filter choose which content to allow, you can check Only Allow Websites Which Are On The Allow List box in this window for the most restrictive control possible.

**Microsoft Family Safety.** With Win7, Microsoft has gone a slightly different route regarding Web filtering. Integrated parental controls in Win7 are limited to controlling access to the computer and applications. Web filtering is left to Microsoft Family Safety, which is available through Microsoft’s



**Before you begin configuring parental controls, you should create a new account for each member of the family. This lets you set different limits for different members of the family.**

Windows Live service and can be installed on WinXP and Vista, as well.

Windows Live is a combination of online applications (such as Hotmail, Spaces, Calendar, and SkyDrive) and PC applications for accessing these services. Microsoft’s Family Safety is one of these services.

To get started, visit Windows Live ([www.windowslive.com](http://www.windowslive.com)) and create a Windows Live ID by clicking the Sign Up link. Alternatively, if you already have a Windows Live ID, just click the Sign In To Windows Live button and enter your login information.

Once you’ve logged in, click More at the top of the page and select Family Safety. Click the Download button and click Run when prompted. (UAC may ask for additional permission on Vista and Win7.)

Once the download is complete, the installer should run automatically. The installer will attempt to install all Windows Live applications. Uncheck the box next to any application you don’t want to install (the only one we need for our purposes is Family Safety). Click Install to begin the installation. The installer may download additional files for the installation.

When the installer finishes, it will try to set your default search provider to Bing and your default home page to MSN. You’ll have to clear the checkbox next to each of these options if you want to keep your current default search provider and home page. Click Continue to finish the installation. Once installed, the interface is the same on WinXP, Vista, or Win7.

To start Family Safety, open the Start menu, click All Programs, select Windows Live, and click Windows Live Family Safety. The first time you run this, you may have to enter your Windows Live ID and password.

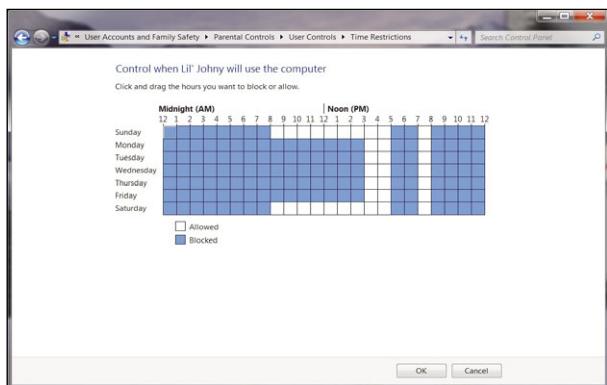
You should see a list of user accounts. Check the accounts you want to monitor and click Next. In the drop-down list under Family Safety Members,

select the appropriate account name for each account and click Save. You’ll need to open a Web browser and log back in to Windows Live to edit the additional settings.

Once logged in to Windows Live, click Family Safety in the More drop-down menu. Click Edit Settings to change the settings for that user. Available options include Web Filtering, Activity Reporting, Contact Management, and Requests. Click Web Filtering, and you’ll see that it includes three different levels (Strict, Basic, and Custom). Strict blocks all Web sites except for kid-friendly sites, while Basic attempts to block adult content only. Clicking Custom brings up a list of different categories and lets you choose which categories to allow (such as Social Networking Websites, Web Mail, and sites that haven’t been rated or

evaluated). You can also set up a customized allow/block list here.

Activity Reporting lets you see what a user has been doing while online, and Contact Management allows you to control who your children interact with through Windows Messenger, Windows Live Hotmail, and Spaces (note, however, that Family Safety has no control over other instant messaging applications such as AIM and Google Talk). Finally, Requests is a place where you can see requests from children to unblock certain sites or allow certain contacts.



**Vista and Win7 let you control when your children can log in to the PC, making scheduled uses of the computer a little easier and ensuring your children don't spend too much time online.**

## Access To Applications

If you're running Vista or Win7, you can also control access to applications and the PC itself. To access these settings, open the Control Panel and click Set Up Parental Controls For Any User. Select the user account and make sure On, Enforce Current Settings is selected at the top of the User Controls window.

Parental Controls include Time Limits, Games, Allow Or Block Specific Programs, and, in Vista, Web Filtering. Time Limits allow you to control when each user can log in to a PC using their account. When you click the Time Limits link, you'll see a graph that blocks out each day of the week into one-hour increments. White blocks indicate that your child is

allowed to be online at that time. Click a block to change it blue and block access during that hour. If your child is on the computer when his or her time is expiring, the system will display an alert at the one-minute mark and log them out when time is up. As the administrator, you can extend the time or allow access at off times by making adjustments in Parental Controls.

The Games link lets you block games with specific ESRB (Entertainment Software Rating Board) ratings. For instance, if you have a 12-year-old, you might want to allow them to play games

rated Everyone 10+ while blocking games rated Teen or higher. Click Set Game Ratings to choose a rating level. Also, Parents can block or allow games included with Windows, such as Minesweeper, by clicking Block Or Allow Specific Games in the Game Controls window.

Finally, the Allow And Block Specific Programs link lets you control which

programs your child can use on the computer. If you opt to limit your child to only the applications you allow, Windows will do a quick scan of your system and list the installed programs. For each installed program, Windows may list several .EXE files. If you want to completely enable all functionality within a given application, you will need to allow access to all .EXE files under that application. If the program you want to allow is not on the list, click the Browse button at the bottom of the window to locate and select that application.

## Protection Is Just A Click Away

While the parental controls in Windows may not be perfect (few



## Watching Your Children Online

**M**icrosoft's new Family Safety al-lows parents to monitor what their children do online, but the functionality is a far cry from that of some third-party applications, such as WebWatcher (\$169.95; [www.webwatchernow.com](http://www.webwatchernow.com)) and SpyAgent (\$69.95; [www.spytech-web.com](http://www.spytech-web.com)), that can capture keystrokes and even snap pictures of the screen.

If you're interested in using a third-party utility to keep a closer eye on your child's activity, there are some things to consider. First, remember that some tools can generate a large amount of data. If you're not prepared to sift through it all, what's the point? Furthermore, when it comes to screen captures, some tools snap screenshots at regular intervals. Not only might this produce more data to sift through, but screenshots might take up additional room on your system. Finally, know what the software you choose is actually recording. Does it record IMs? Emails? ▀

such controls are), they are an invaluable tool, and Microsoft has done a good job making the tools flexible but easy to use. ||

BY CHAD DENTON



# Maintain The Family PC

## Keep Things Running Smoothly

If you think a single-user PC rapidly accumulates “junk” files and other bric-a-brac, know that it’s even worse on a multiuser computer. Unnecessary files take up drive space and can slow down overall performance.

We’ll tell you how to perform several common maintenance tasks in Windows XP, Vista, and 7. Where applicable, we’ll also discuss third-party utilities that do a better job or are easier to use. For best results, log in to your PC’s Administrator user account to perform the following actions.

### Drive Cleanup

Windows’ Drive Cleanup frees drive space that’s storing junk data such as temporary files, files in the Recycle Bin, and Web page elements cached by your browser. Run it on each User Account except as noted.

**WinXP.** To launch Windows Explorer, press WIN (the Windows logo key)-E. Next, right-click the drive partition (storage section) you want to clean, such as

Local Disk (C:). Select Properties. Click the Disk Cleanup button, and then wait a minute or two as Windows takes stock of files you can probably delete or compress (digitally compact to save space).

Disk Cleanup lists the amount of storage space you can reclaim in various categories, such as the Recycle Bin and Temporary Files. Select categories by clicking their checkboxes. It’s generally safe to select anything in the Files To Delete list except for Compress Old Files, which can cause your system to run more slowly later on. Click View Files if you want to preview the data on the chopping block. That’s a good idea for the Recycle Bin, in case you’ve changed your mind about a file you’ve deleted. Click OK and Yes when you’re ready to permanently delete things.

Click the More Options tab for additional areas to clean, namely Windows Components and Installed Programs. These launch different parts of Add/Remove Programs. The former lets you get rid of Windows utilities and applications you never use, and install others. Uncheck an item to remove it. Some items, such as

Accessories And Utilities, have subitems, such as Games; double-click an item or click Details to explore these. A shaded checkbox means that not all sub-items in a category are selected.

When you're ready to proceed, click Next. If you're installing a Windows component, you may be asked to insert your installation CD or to browse to your computer's recovery partition.

The Installed Programs section under Disk Cleanup's More Options tab lets you uninstall third-party apps. Click Clean Up, click a program, and select Remove or Change/Remove. If the button has the word Change on it, you may be able to repair an installed application that isn't working properly.

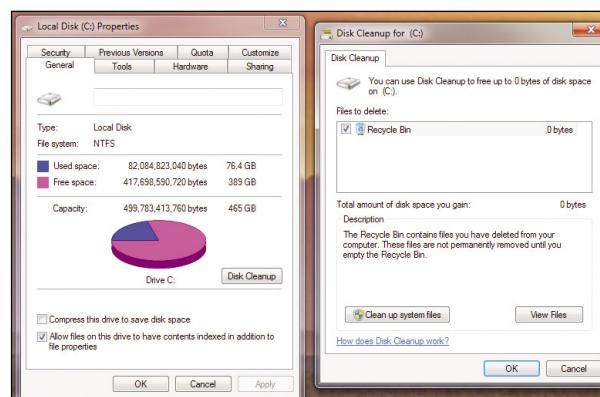
**Vista.** Use the instructions for WinXP. If you have more than one User Account on your PC, you may be asked whether you want to clean up files from the current account only or all of them at once. Choose the latter. Vista's More Options tab now has a Programs And Features section. Click Clean Up to uninstall apps. The Turn Windows Features On Or Off link lets you activate or deactivate OS (operating system) components.

More Options also lets you get rid of older System Restore points. Under System Restore And Shadow Copies, click Clean Up and Delete.

**Win7.** In Win7's Windows Explorer, be sure to right-click a drive letter on the left column of the panel, not in the middle under Hard Disk Drives, before you choose Properties. Otherwise, Win7's Disk Cleanup resembles Vista's. One difference is a Clean Up System Files button that deletes junk files on *all* User Accounts, Microsoft says, not just the account you're currently using. Also, the More Options tab will appear after you click Clean Up System Files. Choose items to erase, and then click OK and Delete Files.

## Browser File Cleanup

Whether you're shopping for gifts or planning a surprise party, there are times when you don't want your family members to know where you've surfed.



**Windows 7's Disk Cleanup has a Clean Up System Files button that gets rid of unneeded files on all User Accounts simultaneously.**

Microsoft's built-in browser, Internet Explorer, lets you erase your browsing history and get rid of Web-related junk files at the same time. As with Disk Cleanup, do this on each User Account.

**Internet Explorer 8.** Click Safety and then click Delete Browsing History. A settings panel will appear with a few items preselected. If you click Delete, IE will automatically get rid of your browsing history (including autocomplete suggestions in the Address Bar), most cookies, and most temporary

Internet files. However, the top option, Preserve Favorites Website Data, ensures that any site you've bookmarked in your Favorites list won't lose its cookies or temp files. This means you'll still be able to automatically log in when you browse to a bookmarked page, for example, and your Favorite weather sites will remember your ZIP code.

The downside of flushing such data: Autocomplete won't work as well, Web pages may take longer to load (but may have fresher content), and you

## System Restore

**S**ystem Restore lets you "roll back" a PC to an earlier system state without losing any changes made to personal files in the meantime. Although it's not a tool to use lightly and it doesn't always solve every problem, System Restore is often the quickest way to reverse an unfortunate mistake and get your computer back to normal. That's a big help when you're not sure what another user did to mess up a shared PC.

**WinXP.** Click Start, (All) Programs, Accessories, System Tools, and System Restore. The default option is Restore My Computer To An Earlier Time. Click Next. Select a calendar date in bold, which denotes a day during which a user or Windows created a restore point. Choose a rollback time on the right, if there's more than one. Finally, click Next twice. Leave your PC alone until System Restore tells you the outcome.

**Vista.** Follow WinXP's instructions to open System Restore and click Next. A simple list of available restore points appears, sorted by date and time. Choose one and then click Next and Finish.

**Win7.** Launch System Restore using WinXP's directions, but then select either Recommended Restore or Choose A Different Restore Point if you see these options. Click Next. The Show More Restore Points checkbox gives you more choices. Select a restore point and click the Scan For Affected Programs button to see any drivers, applications, and updates a particular restore point will modify. This Win7 feature reduces the customary guesswork when you're trying to use System Restore to fix a specific misstep. After choosing the best restore point, click Next and Finish. ■

won't have a browsing history to help you find a site you've visited before.

Other items you can nuke with Delete Browsing History include Form Data (autocomplete suggestions when you fill out online forms), Passwords you've told IE to remember, and InPrivate Filtering Data, which helps this IE feature figure out where news of your surfing habits winds up when a site you visit shares that information with third parties. Click Delete when you're ready to erase the items you've selected and close your browser when you're done.

Speaking of IE's InPrivate Browsing (click Safety and In-Private Browsing), this feature prevents some file accumulation from occurring by keeping your PC from retaining your browsing history, cookies, and other files. You can also click Tools, Internet Options, Advanced, and Empty Temporary Internet Files Folder When Browser Is Closed, and then Apply and OK.

## Defragment Your Hard Drive

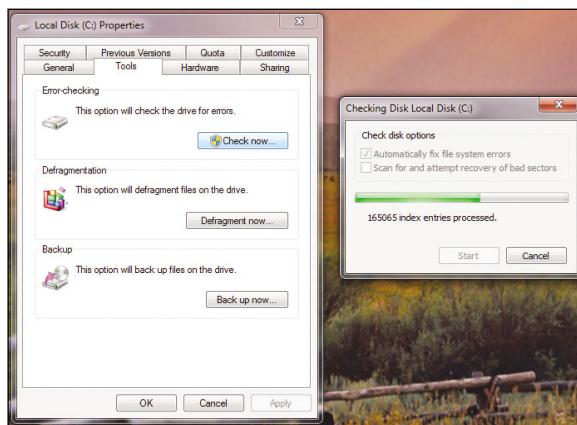
As you write new files to a hard drive and delete others, its available space becomes fragmented into free spaces here and there. A fragmented drive may not have enough contiguously free space to store a large file, such as a video clip, without breaking it into chunks that fit the available space. And because a hard drive has to physically move its heads to access every bit of the file's data stored on one or more spinning disks, it takes much longer to open a fragmented file.

Defragmenting rewrites the drive's data more compactly. If your PC feels slow, apps launch slowly, and video editing causes a lot of drive activity, you may need to defrag your hard drive.

If you have an SSD (solid-state drive) instead of a hard drive, however, don't defragment it. It won't help, and it can actually shorten your SSD's life span.

**WinXP.** Under the Tools tab in your drive's Properties window, click Defragment Now. Next, select a drive in the

Volume column and click Analyze. Disk Defragmenter will display your drive's data allocation as a group of colored lines; a legend explains what each color means. It will also recommend defragging or not defragging. Click Defragment to start the procedure. Your PC will feel slow until the defragging is done.



Win7 can check some drive partitions for errors without a reboot.

**Vista.** Follow WinXP's instructions, but click Defragment Now twice instead of once. By default, Vista automatically defrags your drive at a time you can set. With Run On A Schedule (Recommended) selected, click Modify Schedule. Specify a time when your PC will be turned on, but you won't be using it.

**Win7.** Use WinXP's directions. Win7's verbiage differs only slightly from WinXP's and Vista's; its Configure Schedule button corresponds to Vista's Modify Schedule.

Even in the Win7 era, third-party defrag utilities tend to speed up PC usage better than Windows' built-in defragmenter. Most can also do this using less processing power, so they won't disrupt your productivity. Finally, some can run even on drives that are nearly full, unlike Windows', and may be better at slowing down future fragmentation.

## Check For Drive Errors

When errors occur or an app or a saved file suddenly doesn't work, it's time to check your drive for trouble.

**WinXP.** Once again, start out under the Tools tab in your drive's Properties panel. There's an Error-Checking section; click Check Now, Automatically Fix File System Errors, and Start. Your PC will test your hard drive or SSD. If the brief diagnostic doesn't turn up any issues, click OK, and you're done.

On the other hand, if the scan does encounter anomalies, click Scan For And Attempt Recovery Of Bad Sectors and Start. This starts a more detailed drive check. If it can't launch the scan while Windows is running, click Yes to schedule it for the PC's next startup. Reboot your system.

**Vista.** The WinXP directions hold true, except that Automatically Fix File System Errors will be enabled by default. If Vista can't scan the drive you selected while it's in use, click Schedule Disk Check and reboot your PC.

Vista politely tells you the results of the scan, even when nothing is wrong.

**Win7.** Follow Vista's directions. One notable change: Win7 may be able to scan a volume in use, such as the boot drive, without rebooting. If a button labeled Force A Dismount appears, close all other applications and click it.

Every drive develops a bad sector now and then. It's nothing to worry about, as the drive will simply deactivate that area and replace it with a spare. Granted, you'll need to replace any corrupted files from backup.

However, if more errors show up over time, the drive may be failing. Use a third-party diagnostic utility such as Seagate's free SeaTools ([www.seagate.com/support/seatools](http://www.seagate.com/support/seatools)) to give the drive an in-depth scan.

## Safety In Numbers

Don't forget to back up your files regularly and run a good antivirus program with a firewall. The other users of your PC will thank you. ■

BY MARTY SEMS



# When Your Computer Loses That Vintage Appeal

## Tips On Buying A New Multiuser PC

Thus far, we've covered a number of ways for you to manage and maintain your family PC. But if it becomes evident that your PC's best years are behind it, your family may be better served by a brand-new PC. To help you find a new system, we'll give you some tips about what hardware is most important in a computer that everyone must share.

### Needs To Consider

It's not easy to make everyone happy. Your daughter may want a big monitor to edit photos, while your son may want the fastest system possible for playing video games. You also have a budget to consider and probably a few preferred features of your own. When it comes to sharing the PC, there are a couple of specifications that stand out more than they would if you were just buying a PC for yourself. First off, hard drive space is a concern, especially if your family has a rapidly growing digital music, photo, and video collection. To give yourself room to grow, we'd recommend purchasing a PC with at least 750GB (gigabytes) of drive space, so everyone can have room to keep at least some of their personal media on the PC. You may even want to custom-configure a system from a vendor such as iBuyPower ([www.ibuy-power.com](http://www.ibuy-power.com)) that lets you select drive capacities up to 2TB (terabytes), if everyone has a large digital collection.

When sharing the PC, others may often want to leave programs open to make it easy for them to return to their work. Using several programs will tax the memory on your PC, so you may also need to invest in a computer with 4GB or more of RAM (random access memory). Note that if you want more than 4GB of RAM, you'll need a 64-bit operating system, because a 32-bit OS can only use up to 4GB of RAM.

The release of Windows 7 also makes your choice of operating system important, because some computers may come with Windows Vista preinstalled—and offer a free upgrade coupon—while others may feature a version of Win7. Depending on your preference, you may want to go ahead and invest in a PC with Win7, rather than needing to perform an upgrade, or worse, needing to format and install a fresh copy of Win7.

### The Necessities

Below, you'll find the major points to consider for the hardware you'll find in every PC.

**Processor.** When considering a PC's processor, the big choice is whether to go with a dual-core or quad-core model, which is the number of processor cores found on a single processor die. As you may have guessed, quad-core is superior to dual-core. Multicore processors have the ability to separate the handling of tasks to share the

load, so the job will get done more quickly than it would have if just one core were doing the work. And the processors work best if your apps are designed to work with multiple cores; however, you'll still see performance gains with programs not designed for multicore systems. A variety of current applications support dual- or quad-core processing, and many more are expected in the near future.

**Graphics processor.** The PC will either offer integrated graphics, which is a chip built into the motherboard that shares resources with the PC, or feature a video card whose sole job is to handle video-processing tasks. If you or the kids play video games or you plan to edit home movies on the PC, it'd be wise to invest in a PC with a dedicated video card. One of the key graphics processor specifications is the amount of video memory the card offers. The more memory the card offers, the faster your computer will be able to play games and the greater support it will offer for high-definition video, such as 1,920 x 1,080 or larger. And to let you easily connect your PC to an HDTV, many new computers, such as MSI's Wind Box DE200 (\$324.99; [www.msicomputer.com](http://www.msicomputer.com)), offer an HDMI output to let you use a single cable for audio and video.

**Optical drive.** Most computers include a DVD burner that can both play and record media on DVDs. But if you own an HD digital camcorder or have invested in a BD (Blu-ray Disc) player for your home theater, you may want to consider a computer with a built-in BD burner or player. A BD burner will give you the ability to

maintain the HD quality of your home videos on disc, while a BD player will give family members freedom to watch BDs when the home theater is in use. That being said, if you only watch DVD movies and don't own an HD camcorder, you may be better off sticking with a DVD optical drive until prices on BD media become more affordable.

**Power supply.** Although not always mentioned in the specs, the wattage of the power supply may be important if you plan to upgrade the system with a newer video card in the future. Most current high-end graphics cards require 400-watt or greater power supplies. People who think they may want to improve their PC later should make an effort to check the wattage of the power supply before purchasing the computer.

**Internet connection.** If your home has a wireless network, look for a computer with built-in Wi-Fi. Nearly all new PCs with Wi-Fi support the newly finished 802.11n standard, which is also backward-compatible with 802.11b/g signals. Pretty much any PC will include an Ethernet input, so you'll be able to use a wired connection.

### Extras

Depending on what you do with your computer, you may want to look for a PC with the following components.

**Memory card reader and connectivity ports.** If you have a digital camera or flash-based digital camcorder, a built-in memory card reader is a handy feature. You'll no longer need to connect an external card reader or find the camera's cord to transfer photos to your PC. Front-panel USB,

FireWire, and audio ports are also nice conveniences, because you won't need to move the PC to connect devices. In particular, front panel inputs are great for those who use headphones or need to quickly connect or disconnect USB flash drives and external hard drives.



CyberPower's Media Center 8000 features a built-in TV tuner to let you watch and record HDTV.



iBuyPower allows you to custom-configure systems with up to 2TB of hard drive space.

**TV tuner.** With Windows Media Center, a feature included on Vista Home Premium and Ultimate and Win7 Home Premium, Professional, and Ultimate, and a PC with a built-in TV tuner, you can watch and record live HDTV on your PC. If the idea of using your computer as a DVR sounds appealing, look for a model with a built-in TV tuner, such as CyberPower's Media Center Ultra 8000 (pricing begins at \$799; [www.cyberpowerpc.com](http://www.cyberpowerpc.com)). Note that if you opt to record HDTV on your PC, you'll want to ensure that the computer has plenty of hard drive space.

**Monitor.** A widescreen display can be a significant upgrade for people still using a monitor with a 4:3 aspect ratio. For those who regularly multitask, it's easier to work with two or three apps on a widescreen display, because you have more horizontal screen real estate. Also, many new monitors now feature the 16:9 aspect ratio to match the way movies and TV shows are filmed, so you won't see any black bars when watching media on your computer.

### Last But Not Least

Finally, before you purchase a system, find what type of warranty comes with it, even if you're apt at repairing the PC yourself. With a good warranty, the family won't be stuck without a computer for long, if something happens. ■

BY NATHAN LAKE

# Adobe Photoshop Elements 7

## Introducing The Smart Brush

The first rule in photo editing is to leave the original image alone—when you edit the image itself, you’re altering pixels. When you use adjustment layers instead, you’re creating an imperceptible, editable film on top of the image while keeping the original intact.

Understanding and using layers in photo editing can be among the hardest concepts for newcomers to grasp. The Smart Brush tool in Photoshop Elements aims to take the difficulty away by combining selection and application into a single step. Let’s walk through the basics of the new Smart Brush tool.



Smart Brush creates adjustment layers and impressive results with minimal frustration.

work with, such as a landscape photo.

From the toolbox on the left, select the Smart Brush tool, represented by a brush with a gear nearby. The Smart Brush pop-up menu box opens from the Options bar. The box lists all the adjustments available to the Smart Brush tool, organized into nine categories with a Show All option. The categories are self-explanatory, with names such as Black And White, Nature, and Special Effects. Some fun features are found in Portrait, such as Lipstick, Spray Tan, and Very Pearly Whites.

The default setting for this pop-up panel of tools displays them in a “large list,” but you can configure it differently. Click the arrows to the far right of the menu box, opposite the category list. Another menu panel appears; choose among the various thumbnail or list configurations.

If you’d prefer to have the menu box floating, rather than popping out of the Options bar, simply drag it out to your preferred workspace location.

### Workspace Walk

Now that you’re familiar with the pop-up menu panel, let’s see how using the adjustment tools themselves works. For our example, we’ll be using

a landscape photo where the color of the greenery leaves a little to be desired, so we’ll click Nature and choose the Greenery adjustment. After selecting the tool, close the menu box by clicking the tiny “X” in the top-right corner.

The cursor transforms into a circle with a plus sign (+) inside. This is the brush tip. If you find the diameter a bit large, go up to the Options bar, click the arrow next to Brush, and choose another size. You can also enlarge or reverse by tapping the right or left bracket key.

As you click and move the circle around the photo, it selects those portions of the image. Don’t be nervous about using it—if the selection seems sloppy, it’s easily reversed. Go to the far left of the Options bar and click the brush with a minus sign (-) (or hold down the ALT key) and use this deselection brush to smooth away the sloppiness. You’ll notice that Photoshop Elements makes the adjustments as you brush.

To apply another adjustment to any area of the photo, click the New Selection brush (to the left of the Add To Selection brush), select a new adjustment preset from the pop-up panel, and paint in the photo again. If you move the brush tip over an already-selected area, it will change to a deselect tip. Click to deselect and then reselect the area.

### Layer Changes

Take a look to the right at the Layers palette—you’ll notice there are spanking-new adjustment layers that reflect each change you’ve made. Next to each adjustment is a little eyeball. Click it to close the eye so you can see the photo without the adjustment. Click it again to open the eye and again view the photo with the adjustment layer intact.

So far you’ve been able to create layers with little work. Smart Brush’s other cool feature is that many of its adjustments can be tweaked further. Look back to the image in the workspace—the first selection area with an adjustment is identified with a red square pin. Each subsequent area will have a different color pin. Right-click the adjustment pin and choose Change Adjustment Settings to see what’s available for each adjustment you’ve made.

Smart Brush offers powerful editing with little effort while demystifying layers for newcomers. ■

BY ANNE STEYER PHELPS

# Browsers

## Keep Track Of Passwords With Your Browser

Unless you use the same password for everything (which you really shouldn't do), it can be next to impossible to remember all of your login information. Thankfully, many popular Web browsers will step in and remember them for you. After all, remembering is one of the things computers do best.

### Internet Explorer

Internet Explorer 8 includes options to save user IDs and passwords as well as other data you might enter in form fields. To see whether these options are enabled, open the Tools menu and choose Internet Options. Select the Content tab and click the Settings button under Auto-Complete. In Settings, tick the checkbox next to User Names And Passwords On Forms and click OK.

As long as you have this feature enabled, you should see a dialog box when you fill in a user-name/password combo asking whether you want IE to save the information. You might not want to

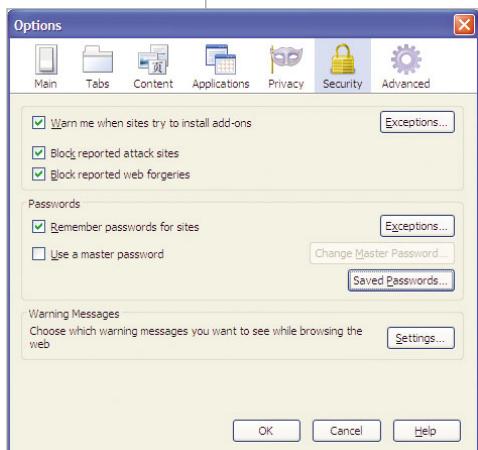
save passwords for especially sensitive pages, such as an online banking site. For most run-of-the-mill sites, however, having the browser fill out your ID and password automatically can make navigating the Web a lot easier.

### Firefox

To see if Firefox 3.5 is set up to save Web logins and passwords, click the Tools menu, choose Options, and select the Security tab. Under the Passwords section, check the box next to Remember Passwords For Sites. The next time you enter a password, a bar at the top of the Firefox window will ask whether you want the browser to remember the information.

Firefox, as well as other popular browsers, includes options to save Web site login and password information.

If you're worried at all about someone else potentially using your computer and logging in to sites with your personal data, you can also check the box next to Use A Master Password. With this option enabled, you'll be prompted to create a



master password, and Firefox gives you feedback on its quality via its Password Quality Meter. This one password becomes the key for unlocking all of the Web sites for which you've saved login information. The next time you're browsing, Firefox will request your master password before filling out any Web forms. You'll only need to enter the master password once per browsing session. It's a good security compromise. Just be sure to remember it; if you forget it, you won't be able to access any of the information that the master password protects.

Should you forget a password you're certain Firefox knew, take a look at which passwords the browser is remembering by clicking the Saved Passwords button. From that screen, you can scroll through all of your saved login information and remove any passwords you don't want Firefox to know.

The Exceptions button shows you a list of sites for which you told Firefox not to save passwords. If you accidentally told Firefox not to remember the login for a particular page, you can remove the site from the exceptions list here.

### Chrome

In Chrome, click the wrench menu on the right side of the browser toolbar and choose Options. Click the Personal Stuff tab. Near the top of the window, you'll see a Passwords section with the options Offer To Save Passwords or Never Save Passwords. If you opt to save passwords, Chrome asks if you want to save user IDs and passwords you enter at different sites. You can also decline on a site-by-site basis.

Click the Show Saved Passwords button to see what passwords Chrome is keeping. As with Firefox, you'll see a list of site addresses on the left side of the window and your usernames on the right. Click the Show Password button to see what password Chrome is saving for a selected site. The Remove and Remove All buttons will delete login information if you'd like. You can also click the Exceptions tab to see what passwords you've asked Chrome not to keep. You can remove an entry on the list and then visit the site again if you've changed your mind. ■

BY ALAN PHELPS

# Online

## Bring Together Web Data

[Google Squared](#)  
[Wolfram Alpha](#)  
[Intermediate](#)

**I**nformation abounds on the Web, but bringing together the information you want in a format you can quickly understand is not always so easy. A couple of innovative new sites hope to change that for you.

### Google Squared

Google Squared is an experiment from the same folks who bring you, well, just about everything else on the Web. Available at [www.google.com/squared](http://www.google.com/squared), Google Squared attempts to turn search queries into tables of information rather than just big long pages of search results.

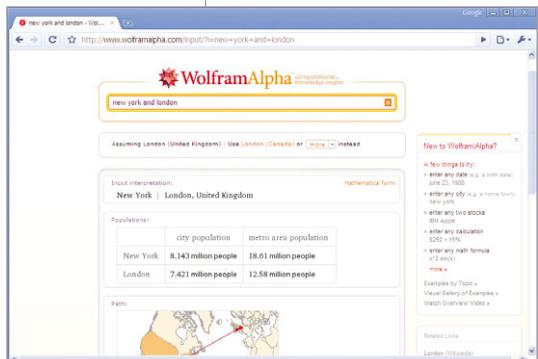
For example, you might search for “world’s largest cities.” Rather than showing you a mere list of Web sites that discuss big cities, the results page creates a chart with city names listed on the left and

different facts about those cities in the other columns. With our cities search, the second column consisted of pictures of the different cities. Other columns included location and language.

On the right side of the page, you can add your own columns by entering a relevant term (such as “population” or “country”) or choose one of the terms suggested by Google. Google then searches the Web to try to find the relevant answer for each square.

The site displays up to 120 facts per query. You can sort the columns as in a database and export the whole thing to Google Spreadsheets where even more options are available, including calculations and the creation of charts.

At first glance, Google Squared is pretty neat. Looking at the actual results, though, is a bit disappointing. Our test search returned some undeniably large urban centers, such as Tokyo, Beijing, and London, but it also included the ancient Egyptian cities Thebes and Memphis. When we added a column for population, the results were inconsistent.



Wolfram Alpha is a different sort of search engine that tries to answer questions rather than simply point you in the right direction.

### Wolfram Alpha

If the concept of Google Squared is interesting to you, you may also want to take a gander at a relatively new alternative known as Wolfram Alpha ([www.wolframalpha.com](http://www.wolframalpha.com)).

The interface of Wolfram Alpha is attractive, and for certain types of searches, the results are impressive. Instead of pointing you to Web pages that might contain the answers you need, Wolfram Alpha attempts to provide the answers itself.

For example, running the same query we tried in Google results in a list of what appears to be the actual and current largest cities in the world, both by city population and metro area population. Population estimates are included, along with a small bar next to each entry that lets you quickly compare sizes.

You might notice some sample Wolfram Alpha searches along the side of the screen. Some of them have to do with science and math, areas in which Wolfram Alpha really shines. Enter any calculation or mathematical equation, and the site will solve it, and, if possible, graph it. Enter a chemical formula, and Wolfram Alpha will name it and show you a diagram and other information.

Google can do some of these things, as well. Enter a simple mathematical equation in a standard Google Search, and you’ll get the answer at the top of the results page. Wolfram Alpha, however, takes this concept significantly further.

The ease with which Wolfram Alpha can compare certain types of places or things also sets the site apart. Want to take a look at the molecular weights of sulfuric acid and water? Just search for “H<sub>2</sub>SO<sub>4</sub> and H<sub>2</sub>O.” Wondering about the difference in nutritional content between apples and pears? Search “apple and pear.” Simple.

Wolfram Alpha does not compete directly with Google—if you want to search for Web pages mentioning particular key words, the well-known search giant is still your best choice. But if you want to find or compare certain types of information, Wolfram Alpha is worth a look. ■

BY ALAN PHELPS

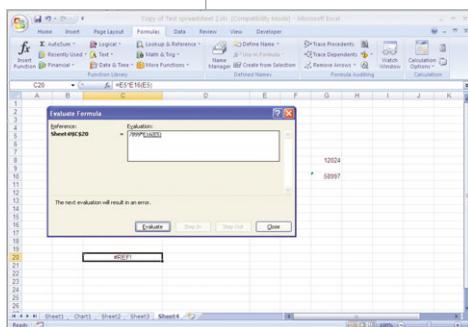
# Microsoft Excel 2007

## Troubleshoot Formula Errors

Spreadsheet

Advanced

WinXP/Vista/7



Confused by what's happening in a complicated formula? Use the Evaluate Formula tool to walk through each step in sequence and find any problems.

Formulas are the engines driving most of Excel's functions. And as with any other engine, one malfunctioning part can cause the whole system to go wrong. This month, we help you troubleshoot your formulas using several tools built into Excel.

### Common Typos

Here are some common problems to watch for when you are manually typing a formula (rather than using a function to set up all the parts for you).

**Missing parentheses.** It's easy to leave out an opening or closing parenthesis

in formulas. In simple formulas, Excel will notice when you insert a left parenthesis without a right one and insert the missing part. If Excel can't figure out what's missing, however, it produces an error message. Sometimes, the message proposes an edited formula; sometimes Excel doesn't even try to guess what you intended.

**Improper range punctuation.** When you're telling Excel to act on a range of cells (such as everything between E5 and E15), you must separate the cell references with a colon. The formula =SUM(E5:E15) adds up the whole range, but =SUM(E5, E15) adds only the two cells listed.

**Typing numbers with formatting.** Leave things such as dollar signs out of formulas. Excel wants to see a plain number. Use cell formatting to give the formula's result the look you need.

### Excel's Instant Help

If you make an error when typing a formula, Excel flags it with a triangle icon in the cell's corner. When you click the cell, you'll see an exclamation point beside it. Click this icon to get help from Excel. The first line of the pop-up list describes the error (such as Formula Omits Adjacent Cells). With some errors, the second line offers Excel's proposed solution (such as Update Formula To Include Cells). For some other errors, Excel can only offer to highlight the core problem for you.

Click Help On This Error to get a summary of what the message means. Or you can choose to Ignore Error or Edit In Formula Bar to fix it yourself.

way. Keep in mind that if you click the option to ignore an error, it won't be flagged in later checks until you do a reset.

If you've never seen an error icon, you're either an exceptional formula writer or the feature isn't turned on. To make sure it's on, click the Office button, choose Excel Options, and click Formulas. In the Error Checking section, make sure Enable Background Error Checking is checkmarked.

### Hunt For Errors

You can ask Excel to scour a worksheet for errors just as you use Microsoft Word's spell checker to find typos. Go to the Formulas tab's Formula Auditing section and click the Error Checking button (it's marked with an exclamation point). As Excel encounters formulas with errors, it presents a dialog box that includes the same options you'd see when a cell is flagged with the icon described above. By clicking Previous and Next, you can move through all the problematic cells Excel finds.

To reset any ignored errors so they show up during this review, click Options in the Error Checking dialog box. In the Error Checking section, click Reset Ignored Errors.

### Analyze Complex Formulas

Finally, here's one more tool Excel offers for spotting troubled formulas. The Evaluate Formula button on the Formulas tab (marked with an Fx label) walks through complex formulas one step at a time, letting you watch what's happening and in what order. It's a great way to make sense of dense formulas that include multiple sets of parentheses holding numerous calculations that take place in a very specific sequence.

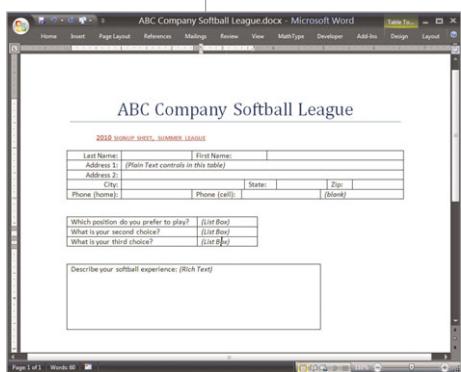
Click a cell and the Evaluate Formula button to see a dialog box that breaks down the calculations. The window underlines the next calculation about to occur. When you click Evaluate, you'll see the calculation's result. That part of the formula turns to an italicized value, which is then used in the rest of the calculations. Keep clicking Evaluate to move through each step in the formula. Do this a few times, and you're guaranteed to have new insight into how formulas work. ■

BY TREVOR MEERS

# Microsoft Word 2007

## Create Forms To Gather Information: Part I

Word Processing  
Advanced  
WinXP/Vista/7



Here is the mockup of the form we are going to send out to identify players for the company softball league.

You have probably run across forms at work or when you want to sign up for something on the Web. Many of these forms are programmed in HTML (Hypertext Markup Language) and XML (Extensible Markup Language) or are created in Adobe Acrobat. But what if you want to create your own forms without having to learn how to use HTML or buy expensive software?

With Microsoft Word 2007, you have the tools to create forms that will meet most needs. We will show you how to do so.

### Two Kinds Of Forms

Word 2007 provides new ways to create forms, but they aren't compatible

with previous versions of Word. However, you have the option in Word 2007 to create forms that will work with Word 97-2003 versions.

People filling in your forms will use fields, which show up as blanks (such as Date: \_\_\_\_\_) where they can type in information. In order for forms to be compatible with previous versions of Word, you must use legacy fields. Word 2007

final column, we will show you how to place legacy fields.

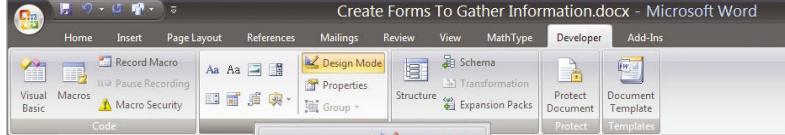
### Examine Content Controls

Take note of the types of fields you can create in Word 2007 before you start. Check above the Ribbon to see if the Developer tab is available. If it isn't, click the Office button, choose Word Options, and checkmark the Show Developer Tab In The Ribbon box. Click the Developer tab and then click Design Mode in the Controls group. We are interested in seven buttons on the left side of the Controls group. (The button at the bottom right is for legacy controls, which we don't need here but will examine in a future column.)

The fields available are: Rich Text, where the user can place formatted text; Plain Text, where the user can place unformatted text; Picture, where the user can insert a picture; Drop-Down List, where the user must select from a list of values specified by the form creator; Combo Box, which is the same as Drop-Down List, except that the user can enter text not in the list; Date Picker, where the user can choose a date from a calendar; and Building Block Gallery, where a user can choose a building block from a gallery the form creator has specified.

You need to have a good idea of your form's layout before you start. You can create a mockup using a pencil and paper or a software tool. After you have a layout in mind, use Word 2007's Table button on the Insert tab to create the table that is going to hold the Word 2007 form fields. Just click the Table button and move your mouse along the squares to specify the number of rows and columns in your table. The live preview makes it easy to see the shape and size of your table. Don't worry if you forget to leave a space for a field. You can adjust the table later if you need to. In our example, we have created a table that will contain a form for people to use to sign up for a company softball team.

Now we're ready to place the content controls and modify the layout if we need to make changes. Tune in for next month's column. ■



You need to activate the Developer tab to turn on Design Mode and gain access to the content controls.

uses a new kind of form field called content controls. Forms of either type can be created in Word 2007. They can then be printed and filled in on paper, or people can fill them in within Word. If you are going to print the forms, it doesn't matter which form type you use. However, if you are going to have people fill out the form within Word, they will be unable to do so if you use Word 2007's content controls and they have an earlier version of Word.

In this series, we will show you how to set up a form of both types. In this column, we will introduce content controls. Next month, we'll look at how to place content controls; in the

# Microsoft PowerPoint 2007

## Working With Tables: Part II

Last month, we covered the basics of creating PowerPoint tables, including building them from scratch, importing them from other Office programs, and rearranging the text boxes and boundaries. This month, we take your chart further by crafting its look to fit exactly the message you want to convey.

### Change The Look

You can quickly change a table's color scheme by clicking one of the available Table Styles displayed on the Design tab under the Table Tools tab. (Remember that the Table Tools tab appears only after you click a table to select it.) Rest the mouse pointer over a style to see an instant preview of how the look affects your table. You'll find a wide variety. Scrolling through the styles in the small window on the tab can get tedious, but you can see all of your choices at once by clicking the bottom arrow beside the styles. If you discover a style you like so much you want to use it for all the new tables you create, right-click the style and choose Set As Default.

To the left of the Table Styles, you'll find the Table Style Options section, which includes several checkboxes to help you further modify the look of the style you choose. Click Header Row, for example, and you'll see the top row of your chart become shaded or bold, depending on the style you're using.

You'll also notice in the little preview images in Table Styles that many of them suddenly display highlighted header rows, too. In the same way, you can experiment with other settings such as Total Row and Banded Columns to see how they work.

Three buttons to the right of Table Styles help you customize the look in even more detail. If you click a table to select it as a whole, you can use the Shading button to change the color that appears behind the entire table. If you select a specific cell on the table (or highlight a series of them), the Shading button changes the color for just those areas. The Border button controls

whether lines appear around the entire table, around individual cells, and more. (You'll probably need to click off the table in order to see your changes taking effect.) The Effects button lets you add bevels, shadows, and reflections in some cases, but you'll find that many of the effects don't apply to many of the table styles.

### Change The Layout

On the other Table Tools tab, called Layout, things start feeling a little more like the intimidating old tables that may have scared you off in the past. The buttons here look pretty techy, but with a bit of study, you'll see that the tools are fairly intuitive controls for things such as the number and arrangement of rows and columns and the text within them.

Expanding your table is simple if you just need more rows at the bottom. Click in the bottom-right cell and press TAB. PowerPoint automatically inserts an extra row at the bottom. If you want to add rows or columns in the middle of the table, you'll need to use the Layout tab's buttons. Click a cell near where you want the new row or column and then use the appropriate buttons on the left side of the Layout tab. Their labels tell you whether they'll insert a new row above or below your cursor or insert a new column to the left or right of the cursor. You can remove the row or column your cursor is in by clicking the tab's Delete button.

You can combine cells by highlighting several of them and clicking the Merge Cells button. This works for both horizontal and vertical groupings of cells. If you decide later that the cells were better off in their separate form, highlight the merged cell, click the Split Cells button and indicate the number of rows or columns you're splitting it across. You may remember from last month's Quick Study that you also can remove cell borders with the Design tab's eraser tool.

Use the tools in the Alignment section to arrange your text properly. Here you'll find the familiar left, right, and center alignment buttons, as well as buttons for centering text vertically. The Text Direction button lets you choose vertical text when that fits your table's design. ■

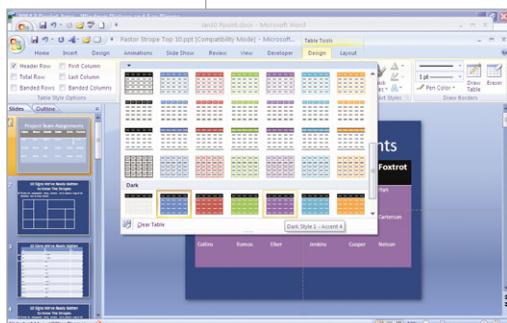


Table Styles offer a whole gallery of quick ways to give your table a new color scheme.

BY TREVOR MEERS

# Quick Tips

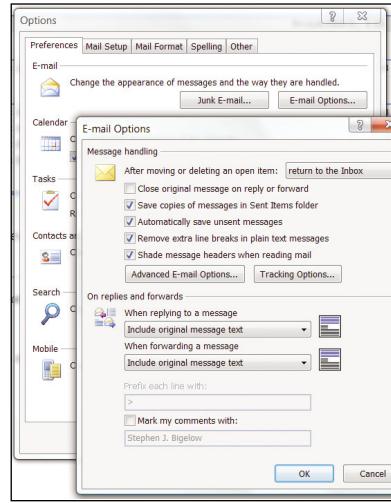
## Secrets For Succeeding In Common Tasks

BY STEPHEN J. BIGELOW

Microsoft  
Outlook 2007

**Question:** How do I stop Microsoft Outlook 2007 from attaching an original message or thread when I start a reply?

**Answer:** Including original text with email responses can create large messages, especially during email exchanges where threads can get cumbersome. It's a simple matter to delete the message inclusions manually, but Outlook 2007 provides extensive control over the way that messages are included for replies and forwards. With Outlook 2007 running, click Tools and Options. Select the Preferences tab and then click the E-mail Options button. Locate the On Replies And Forwards area and use the When Replying To A Message and When Forwarding A Message drop-down menus to control original message handling. By default, original message text is included, but you can opt to not include the original text, include the original text as a file attachment, or select from several other formatting options. Click OK to save your changes.



Microsoft  
Outlook 2007  
provides  
detailed  
control over  
the way that  
original  
messages  
are included  
with replies  
and forwards.

Video Card  
Power Supply

**Question:** Do I need a bigger power supply for a higher-end video card?

**Answer:** The challenge with high-end video cards—the kind that fit into a PCI-E (Peripheral Component Interconnect Express) expansion slot—is that their onboard graphics chipsets are extremely sophisticated. It's a bit like having another microprocessor or two in your system. Like the main Intel or AMD CPU on your motherboard, those graphics chips need a lot of power and careful cooling. Most entry-level desktop systems don't include enough "leftover" power

supply capacity to support the added power demands of a new, top-of-the line video card.

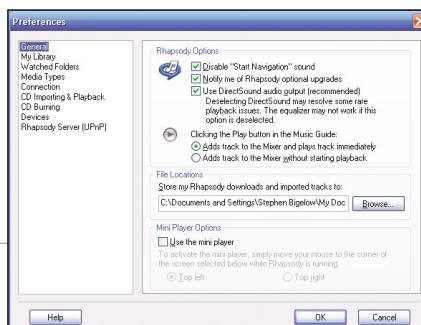
We recommend checking the capacity (wattage) of your system's power supply before shopping for a new video card. You can find the power supply wattage listed in the system's documentation or online through the system manufacturer's Web site. Check the system requirements for each video card you consider and see what system power capacity is recommended. If the recommendation is higher than the power supply's capacity, you might need to upgrade the power supply before installing the new video card.

Rhapsody 4.0

**Question:** How do I add tracks to Rhapsody's Mixer without playing them?

**Answer:** Rhapsody 4.0 lets you control the way that tracks are added to the Mixer. With Rhapsody running, click Tools and select Preferences. In the Rhapsody Options area, locate the Clicking The Play Button In The Music Guide option. By default, the track will play immediately, but you can change that by selecting the alternate radio button that adds the track without playing it. Click OK to save your changes.

Use Rhapsody's preferences to control the playback behavior of tracks added to the Mixer.



## Fax Interruptions

**Question:** Why does my outgoing fax drop when I get an incoming call? I have a line with two phone numbers: one for phone and another for fax.

**Answer:** When you're talking on the phone and another call comes in, you'll hear a call waiting tone. Unfortunately, this tone can disrupt the data transfer during a fax exchange and cause the fax machine to disconnect. The easiest way to fix this

## Online Threats

**Question:** Is there a way to test my PC and verify that it's secure against online threats?

**Answer:** The challenge with PC security is that you really don't know just how secure the PC is until it's attacked, and by then it might be too late. One means of gauging PC security is to use an outside testing service, such as the ShieldsUP! service from Gibson Research ([www.grc.com](http://www.grc.com)). This free online service can test your PC for file-sharing, port, messaging, and browser vulnerabilities. The utility also provides detailed information about the vulnerabilities. If any vulnerabilities are discovered, it's usually possible to make configuration changes in your security software that will fix the threat, such as closing open ports.

## Online Predators

**Question:** I'm concerned about online predators. How can I block undesirable users from chat rooms that my daughter visits?

**Answer:** One quick way to block a few offensive IM (instant messaging) or chat room visitors is to simply blacklist them through the IM software. For example, in AIM 6, click Edit, select Settings, and then select the Privacy tab. Select the Block Only The Users Below radio button and enter the offending screen names into the Block List. Remember to click Apply and Save before exiting.

There are a few caveats with this approach. First, you need involvement in your child's online activities to know which users are offensive or undesirable. If you don't monitor the child's activity and clarify behaviors that are acceptable or unacceptable, there is no effective way to protect her.

Second, this simple blocking tactic is not a parental control feature—your child can easily unblock users later. If you want stronger control, use the parental controls that accompany the IM/chat software. Parental controls are typically password-protected so that the child cannot undo the parents' settings. For AIM, visit [parentalcontrols.aol.com](http://parentalcontrols.aol.com) to download and set up the Parental Controls software.

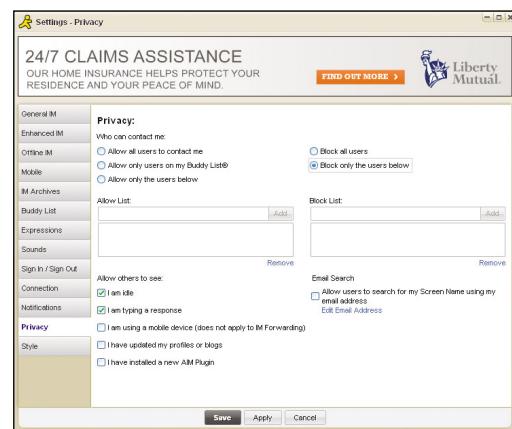
problem is to have a separate line that is dedicated to the fax. However, the added expense of a separate line may not be appropriate for a home or small office that only exchanges occasional faxes.

You may be able to disable or suppress the call waiting tone. Of course, this would only help for outgoing faxes, but check with your telephone provider to learn more about the specific features it provides.

<b>PASSED</b>			<b>TruStealth Analysis</b>	<b>PASSED</b>		
Your system has achieved a perfect "TruStealth" rating. Not a single packet — solicited or otherwise — was received from your system as a result of our security probing tests. Your system ignored and refused to reply to repeated Pings (ICMP Echo Requests). From the standpoint of the passing probes of any hacker, this machine does not exist on the Internet. Some questionable personal security systems expose their users by attempting to "counter-probe" the probe!, thus revealing themselves. But your system wisely remained silent in every way. Very nice.						
Port	Service	Status		Security Implications		
0	<nil>	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
21	FTP	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
22	SSH	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
23	TelNet	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
25	SMTP	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
79	Finger	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		
80	HTTP	Stealth		There is NO EVIDENCE WHATSOEVER that a port (or even any computer) exists at this IP address!		

Third-party testing services, such as ShieldsUP! from Gibson Research, can help identify potential vulnerabilities in your PC.

It's usually possible to make configuration changes in your security software that will fix the threat, such as closing open ports.



Use AIM's Privacy settings to blacklist undesirable or offensive instant messaging users.

# Living Room Media Devices

**N**etworked media devices bridge the gap between your TV and your network. These consumer electronic devices—which use plenty of parts derived from computer technologies—can access video from the Internet, your PC(s), USB drives, and/or flash memory cards and display it on your TV. (Some HDTVs also come with the ability to connect directly to a network

to download content such as weather reports and online video from services such as Netflix [[www.netflix.com](http://www.netflix.com); subscription required].)

You could build or buy an HTPC (home-theater PC) to cover the same ground, but it might be easier and cheaper for you to use one of these dedicated devices. Here's a look at a handful of current options. ■



## Samsung BD-P3600

Many BD (Blu-ray Disc) players feature LAN (local-area network) ports for wired Ethernet connections. This Samsung (\$229.99; [www.samsung.com](http://www.samsung.com)) goes one better: It can use a wireless adapter to connect to a Wi-Fi router. Once online, it can access bonus content for BD-Live movie discs, along with Netflix and Pandora. ■

## Sony PlayStation 3

Among the talents of this Blu-ray Disc-playing game console (\$299.99 and up; [www.us.playstation.com](http://www.us.playstation.com)) are wireless and wired network access, streaming of video and other media from networked PCs, and Web browsing (including YouTube and other sites). Recently, the PS3 joined Microsoft's competing console, the Xbox 360 (\$199.99 and up; [www.xbox.com](http://www.xbox.com)), in providing streaming movies to Netflix subscribers. The Xbox 360 also supplies wired (and wireless, with an optional adapter) access to media files on your networked computers. ▀



## Roku

This reasonably priced set-top box (\$79.99 and up; [www.roku.com](http://www.roku.com)) comes in various models for SD (standard-definition) and HD (high-definition) TVs. It's ready to pull in movies from Amazon Video On Demand and Netflix, baseball from MLB.com, online radio from Pandora, images from Facebook Photos and Flickr, and more. ▀



## WD TV Live

Using a variety of video outputs, including HDMI 1.3 (High-Definition Multimedia Interface 1.3), this Internet-aware appliance (\$149.99; [www.wdc.com](http://www.wdc.com)) can channel up to 1080p video from your local network, up to two USB drives, Flickr, Pandora, Live365, and YouTube. It also supports third-party USB wireless adapters for cable-free connectivity. ▀



# Hardware & Software Reviews

With so much information out there about computers and technology, it can be difficult to even know where to start. What should you consider when building a media center? What are the best wireless networking products? Before you make your next purchase, make sure you take a look at our Hardware Reviews and Software Reviews sections for another opinion. Reviews are separated into easy-to-find categories, including Audio, Computer Parts & Components, Input Devices, and more. You'll find all sorts of great articles on topics ranging from mobile computing and media players to networking and video and photography. You can find articles not only from *Smart Computing*, but also *PC Today* and *Computer Power User*. Search these articles and make your next purchase a smart one.

To find these articles:

- 1 Go to [www.smartcomputing.com](http://www.smartcomputing.com) and click the Read Software Reviews or Read Hardware Reviews link.
- 2 Click any of the links to search by product category. You can also search by subcategory or simply click the Show All link to view all articles under that heading.
- 3 To enter a keyword search, scroll to the bottom of the page and customize your search. You can enter exact terms or broad subjects to find relevant articles within our editorial database.

Subscribers, be sure to add these articles to your Personal Library so you can keep all of your information in one convenient location for future reference. Simply log in, and when you view an article you want to keep, click the Add To My Personal Library link at the top of the page. Create as many folders as you like to keep your information organized.

The screenshot shows the SmartComputing.com website's Product Reviews section. At the top, there are links for Home, Tech Support, Q&A Board, Article Search, and Subscribe & Shop. Below that is a search bar with placeholder text "Change Your Search" and "Frequently Asked Questions" and "How To Buy & Terms To Know". A "Product Reviews" heading is followed by a "Search by product category:" dropdown menu. The menu lists several categories with their respective counts in parentheses: Audio (SHOW ALL), Computer Parts & Components (SHOW ALL), Computers & Computer Systems (SHOW ALL), Handheld/Mobile Computing (SHOW ALL), Input Devices (SHOW ALL), Networking (SHOW ALL), Other Subjects of Interest (SHOW ALL), Printers & Printing (SHOW ALL), Security/Privacy (SHOW ALL), Storage (SHOW ALL), Video & Photography (SHOW ALL), and Voice/Telephony (SHOW ALL). Each category has a link labeled "SHOW ALL" and a list of sub-categories or specific articles. At the bottom of the search form, there is a search button and a note: "© ALL Words (digital AND photography) © ANY Words (digital OR photography) © Exact Match (digital photography - all words MUST appear together)".

*SmartComputing.com's Daily Fun Fact & Stat*

## Companies Say “No-No” To Facebook, Twitter, Etc.

If your company has put the kibosh on using Facebook, LinkedIn, MySpace, Twitter, and other social networking-flavored Web sites in the workplace, you're not alone; 54% of U.S. companies have done the same. This according to a recent study that IT staffing company Robert Half Technology commissioned. Somewhat surprisingly, the survey of 1,400 CIOs at U.S. companies with 100-plus employees indicated that 19% of companies allow business-related social networking use, while 16% permit some personal use. Workers at 10% of companies have full-time access to such sites.

### Apple Inc.

This month in 1977, Apple was incorporated.

According to the *Smart Computing Encyclopedia*, “Their strategy was to create completely assembled computers using relatively attractive designs, advertised and sold just like any other consumer product.”

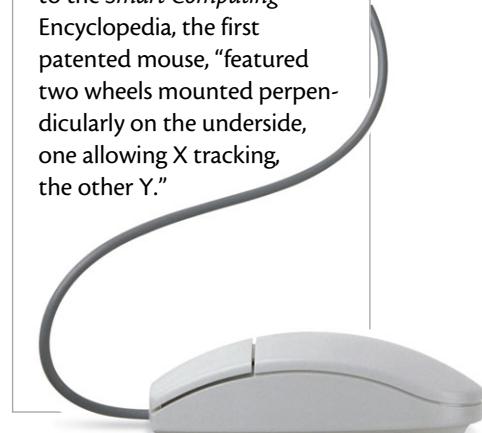


### Make A PC Resolution

This year, make a New Year's resolution to stop computer problems before they start. Check out the Preventive & Regular Maintenance section of the *Smart Computing* Tech Support Center for tips on keeping your computer problem-free all year.

### Douglas Engelbart

On Jan. 30, 1925, Douglas Engelbart, the inventor of the mouse, was born. According to the *Smart Computing Encyclopedia*, the first patented mouse, “featured two wheels mounted perpendicularly on the underside, one allowing X tracking, the other Y.”



# What To Do When You Can't Access A Web Site

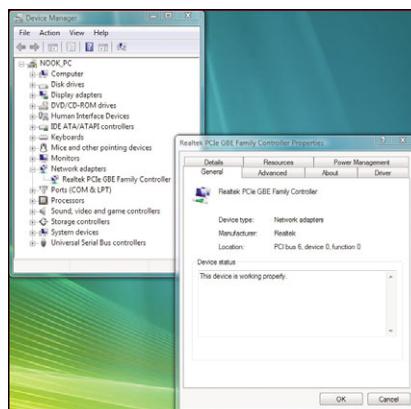
You're eager to update Facebook or check out that funny new video your sister recommended. You open a browser or click a link and . . . nothing. After an interminable wait while Internet Explorer churns away, nothing loads except an error message or, worse, an entirely different site. What do you do? We'll help you figure out what's wrong and get back to where you were going.

## Bad Address

First, figure out the source of the problem. If nothing but an error loads, try a different site. It's entirely possible that the problem is limited to the single URL (uniform resource locator) you're accessing. If you can get around normally elsewhere on the Web, check your source for the "broken" link. You may have mistyped the URL or clicked a bad hyperlink. A close reading of the address will usually reveal typos or malformed addresses. If you're clicking through from an email, look for line breaks or otherwise incomplete links. Many email clients automatically turn text that looks like a URL into a link, but can misread unusual addresses or cut URLs short when the address contains unexpected characters or crosses more than one line. If everything looks all right with the address, try searching the Web for the site you're seeking. Web sites move occasionally, forwarding isn't perfect, and it isn't in effect forever. And, just as with people, eventually someone else moves in. If everything still checks out, consider the possibility that the site is simply down temporarily. Wait and try again later, but, if it doesn't work after awhile, go back to your original source and check to make sure you have the correct URL.



If, on the other hand, you can't get to any other sites either, the problem goes beyond a single bad address. In that case, start your troubleshooting with the browser and local machine. First, see whether other Web-enabled applications can access the Internet. If you use an email client such as Outlook or Windows Mail, see if it can



**Device Manager can confirm that your network adapter is still recognized by Windows and is functioning correctly.**

send and receive. You can also try searching the iTunes Store or using a different browser (such as Google Chrome or Firefox) to see if they can connect. Alternatively, open up Windows' command line interface and see if you can ping a common Internet address such as www.yahoo.com. See the "Take Command" sidebar for more details on simple command line options. If other applications can access the Web, you have a problem with your browser—not with your connection. Check the browser's settings (click Tools and Internet Options in Internet Explorer 8) to see if a privacy, security, or other setting is preventing you from connecting to a given site. Simply closing and reopening the browser may also do the trick. If you're fine after the restart, there was probably just something corrupted in the browser session and you can move merrily along.

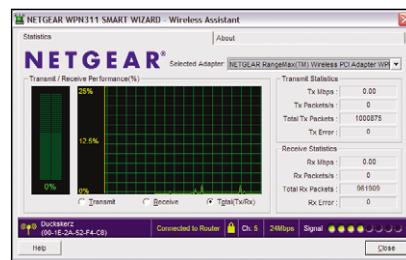
## Bad Connection

When no programs can get online, you have a larger connectivity problem. In that case, the single most likely solution is a simple reboot. There are all sorts of ways that a network connection can go bad, and restarting the machine resolves most of them. If a reboot fails to get you back online, dig deeper into your PC's settings. Check your firewall and security software. Is there an emergency lockdown, parental control, or some other setting preventing you from getting online? Check your hardware. Open Device Manager by right-clicking Computer (My Computer in Windows XP), choosing Manage, and clicking Device Manager. Here, make sure Windows recognizes your network adapter by right-clicking it in the

Device Manager list and choosing Properties. Look for any alerts or errors. Also, check the back of your PC. Is the network cable plugged in? Is the wireless antenna correctly positioned?

If you're connecting wirelessly, open the Windows wireless connection status screen (or your wireless adapter's custom software, if you use that instead) by double-clicking/clicking the Wireless Network Connection icon in Windows XP, Vista, or 7. Make sure you can see your wireless network and that you're connected. You may need to disconnect and reconnect if your settings have changed or your wireless access point has been updated recently.

After running out of local machine options, expand your focus outward. Check the physical connection to your router, modem, and/or wall jack. See if you can access other computers or printers on your local network. Back in the browser, enter the IP address of your Internet gateway or network router (see the manufacturer's documentation for default



Wireless network adapters usually come with software that can help troubleshoot wireless network issues.

settings). If you can access the router's admin console but not public Internet sites, the problem lies with your external connection or modem instead of your machine or network. Look at the lights on all your networking devices. Is everything blinking (or not) as it should, in the appropriate colors? Most routers and modems are well-labeled, and the color codes are pretty intuitive. Solid green is always good. Anything red is almost always bad. Blinking can go either way. Again, check the users guide if you're not sure what you should be looking for.

Whether or not anything appears awry, cut the power to the modem and the router and restore power in that order. Just as with rebooting the PC, restarting network hardware will often resolve whatever problem they're having. If you can't bring the connection back online, and you've confirmed that your internal network is working, call your ISP's (Internet service provider's) help desk. There may be a service outage in your area or they may be able to diagnose a problem specific to your line. ■

BY GREGORY ANDERSON

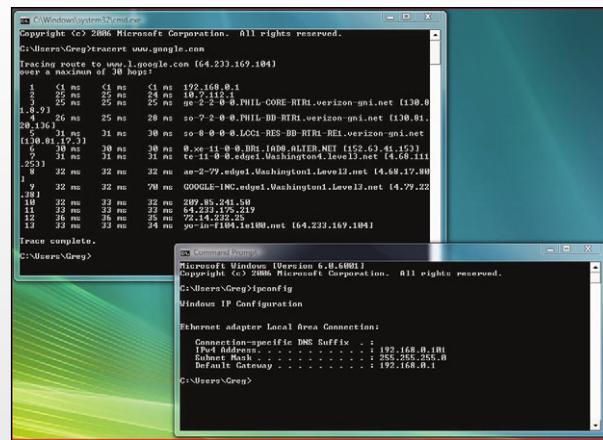
## Take Command

**C**ommand line interfaces have an imposing aura. For old timers, they evoke BBS networks and Unix programming. For those who came to computing in the Windows era, they're a bewildering mix of arcane syntax and obscure keyboard shortcuts. But Windows' Command Prompt (formerly called the DOS Prompt) is a powerful network troubleshooting tool. To launch, just type cmd in the Start search menu in Vista or Win7. In WinXP, open the Run option from the Window's Start menu, type cmd, and click OK.

**PING.** The PING command tells you whether a given site is accessible. This is useful for confirming whether the site is up and whether you have a connection at all. The syntax is simple: type ping [www.yahoo.com](http://www.yahoo.com) and press ENTER to see if your machine can find Yahoo's server.

**IPCONFIG.** Getting your machine's network details (IP Address, Internet Gateway) from Windows' networking properties box can be laborious. Entering ipconfig into the command line, on the other hand, provides info in an instant. To reset the connection without restarting your machine, try typing ipconfig /release, pressing ENTER, and then entering ipconfig /renew and see if that resolves your connectivity problems.

**TRACERT.** Short for Traceroute, the TRACERT command will document each step in the route from your machine to the specified destination. TRACERT is helpful for pinpointing exactly where a request goes, how long it takes at each step, and, if it stops short somewhere, the source of a connection problem. Try tracert [www.google.com](http://www.google.com) as an example. ■



The Windows Command Prompt offers quick and easy connection troubleshooting options.

# How To Fix Common Problems With Utility Programs

No software is perfect, including the utilities designed to help Windows (and PCs in general) become, well, closer to perfection. At their simplest, utilities are programs that help computers perform better. Because computers can perform an immensely broad range of tasks, it makes sense that we have an immensely broad range of utilities that have evolved over the years. Some are free, others are not. Given that most utilities have at least a handful of common support issues, it's impossible to cover even a fraction of the problems you might encounter. However, by choosing from among some of the most popular utility programs and selecting common issues with them, we think we've assembled a list that you'll find helpful.

**Problem:** CCleaner won't install.

**Solution:** CCleaner ([www.ccleaner.com](http://www.ccleaner.com)) is a freeware utility designed to help streamline several system operations. Like a house that collects junk, areas within Windows and your Web browsers collect bits of detritus,

too: cache files, history files, cookies, and so on. The data that Windows prefetches in order to make it run more efficiently ironically may contribute to slowing it down over time. Sometimes, not all of an application vanishes when you uninstall it, and the leftovers can inhibit operation. An optimizing utility such as CCleaner sweeps away this junk so your software runs more smoothly.

Unfortunately, sometimes the utility doesn't install as it should. You might see a pop-up box with the message "Error opening file for writing."

The official fix for this is to run the installation program as an administrator. This is an incredibly common issue across many kinds of applications. Because CCleaner can make changes to the system, it's doubly important (in Windows' view) to make sure that only authorized users are able to install this application. Microsoft recommends that users operate Windows from a Limited/Standard account for everyday situations and only invoke administrator rights when needed. This is one of those times. From My Computer

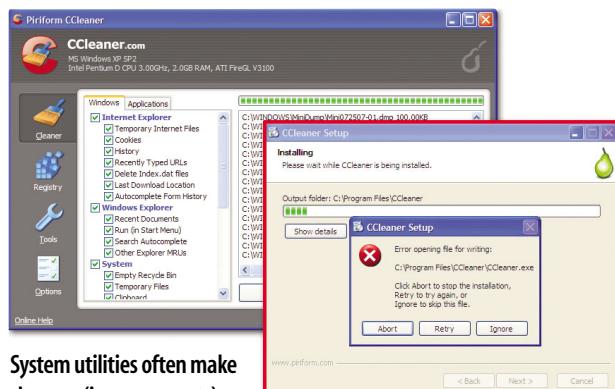


(Computer in Windows Vista and Windows 7), rather than double-clicking the CCleaner.exe installation file, right-click it and choose Run As Administrator from the context menu.

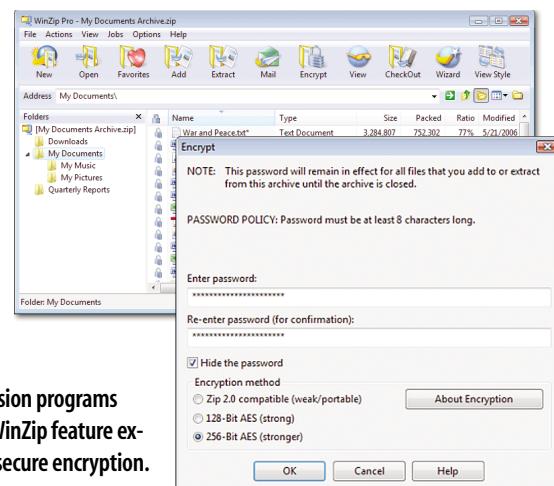
If this doesn't solve the problem, double-check that you're saving the installation file to your PC before running it. And, in some cases, a system reboot seems to fix the problem.

**Problem:** You forgot your WinZip encryption password.

**Solution:** Compression utilities take your file, analyze it, discover redundant pieces of data, eliminate those



System utilities often make changes (improvements) to Windows or other programs within it. Because Windows perceives this as a potential security violation, you may have to assume administrator rights to proceed.



Compression programs such as WinZip feature extremely secure encryption.

redundancies, and spit out a smaller file (often in ZIP format) that preserves all of the original's contents. WinZip ([www.winzip.com](http://www.winzip.com)) is one of the oldest, most popular, and now, most feature-rich of the compression utilities. In the current version 14, WinZip has the ability to encrypt ZIP files either with one of two encryption technologies: Zip 2.x or AES (Advanced Encryption Standard), now the de facto international algorithm for computing cryptography.

Zip 2.x is fairly weak as far as encryption goes. It will thwart any casual hacker, but it won't withstand a determined attack. WinZip recommends contacting [accessdata.com](http://accessdata.com) or [elcomsoft.com](http://elcomsoft.com) if you need to recover a Zip 2.x password. If you opt for 128- or 256-bit AES and forget the password, your data is as good as gone. There's a reason the U.S. government uses AES to protect classified data.

**Problem:** WinRAR won't successfully open a compressed archive.

**Solution:** Like WinZip, WinRAR ([www.rarlab.com](http://www.rarlab.com)) is another very popular compression utility. Every so often, you might encounter a message along the lines of "CRC failed in. . ." followed by "Unexpected end of archive." This problem is common to all compression utilities, not just WinRAR. Essentially, what it means is that the compressed archive (usually in ZIP format, but it could be in RAR format or others) is damaged. Perhaps the system that created the archive had a glitch during the file's creation. Most often, this results in a truncated file, which you can observe if you get a chance to compare the file size of the faulty archive against a functional version. Everyday file corruption could lead to the same problem. Whatever the cause of the damage, the end result is the same: an error message when you try to decompress the archive. If this is a file you've downloaded, you'll need

to contact the file's creator and ask for a new version or else find an alternate copy posted elsewhere. If it's an archive you created yourself, it will need to be re-created.

WinZip Support points out that most archives get damaged during transfer from the host to your system, so another attempt at downloading may remedy matters.

**Problem:** Symantec Norton Utilities won't run under a non-English Windows configuration.

**Solution:** For all of you multi-linguistic globe travelers, you may run across a situation with Norton Utilities ([www.symantec.com](http://www.symantec.com)) in which the program throws up a "Unicode Version Currently Not Supported" error when you attempt to run it. This is a result of Norton not agreeing with the present language selection in Windows. Sometimes, this can be fixed with simply performing a Smart Update. (See the button in the top-right corner of the interface.) Depending on the exact nature of the problem, you may have to change Windows' Region And Language Settings. This is an easy switch. In Windows XP, Open the Control Panel, select Date, Time, Language, And Regional Options. Then, click Regional And Language Options. In Vista/Win7, open the Control Panel,

click Clock, Language, And Region, and then click Change Display Language. If you're running WinXP, go to the Advanced tab and use the drop-down menu to select English (United States). In Vista/Win7, go to the Administrative tab, click the Change System Locale button, and then use the drop-down menu to select English (United States). That should fix the problem.

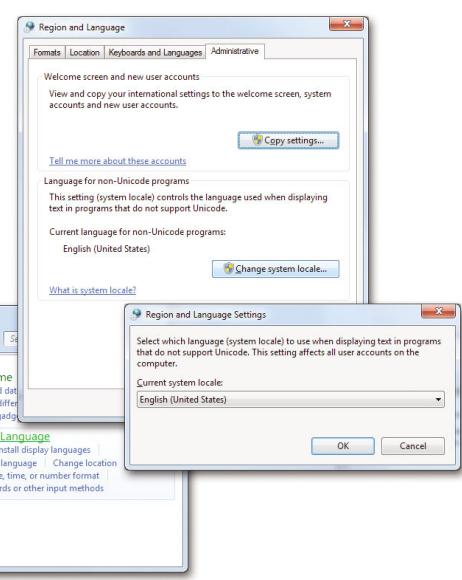
**Problem:** Symantec LiveUpdate thinks you're offline and can't successfully retrieve the update list.

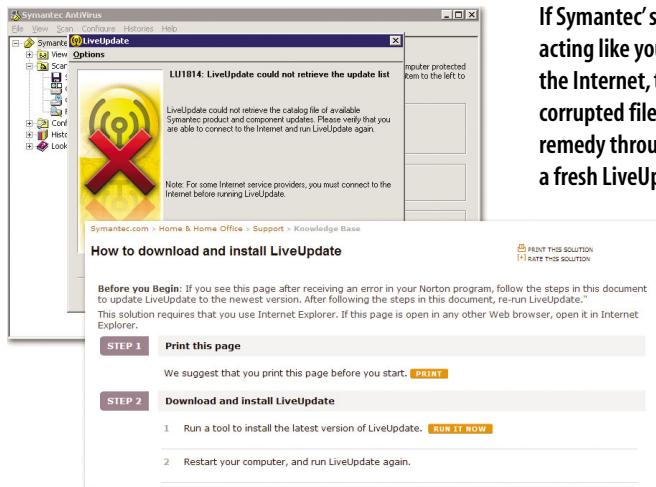
**Solution:** Norton Utilities is only one of Symantec's several famous utility packages. Norton AntiVirus is another. In order to keep these utilities current with the latest patches, Symantec uses its LiveUpdate service to periodically serve updates to subscribers. On occasion, though, users might receive an error with the message: "LU1814: LiveUpdate could not retrieve the update list." A subsequent note mentioning that you should "verify that you are able to connect to the Internet and run LiveUpdate again" might be even more confusing. Why would LiveUpdate think you're offline when every other Internet app shows you're connecting just fine?

Often, the issue has to do with damaged or corrupted files on your system,



**Norton Utilities doesn't always agree with the international character sets in Windows. A quick fix to Windows' language settings should remedy matters.**





although it's also possible that Symantec's LiveUpdate Administrator server could be temporarily down. Another possibility is that a worm or Trojan has made invalid entries in the system folders designed to thwart Symantec security. (If LiveUpdate can't do its job, the utility may not be able to get the patches needed to remove the infection.) This is a well-known tactic with malware.

First, make sure your firewall application is running and then temporarily disable it. An icon for the firewall will

If Symantec's LiveUpdate service is acting like you're disconnected from the Internet, the culprit may be corrupted files that are easy enough to remedy through the Control Panel and a fresh LiveUpdate download.

usually be located in the Windows System Tray. Now, start the troubled Symantec utility and run LiveUpdate. Regardless of whether LiveUpdate can complete, re-enable the firewall.

Now, if LiveUpdate ran successfully, you want to modify your firewall to allow this file to run C:\PROGRAM FILES\SYMANTEC\LiveUpdate\LuComServer\*.exe. The exact steps for doing this will depend on your specific firewall, so consult your documentation if necessary.

If LiveUpdate did not complete, and you're running Windows Vista, open the Control Panel, click Additional Options, and select Symantec LiveUpdate. If you see the User Account Control window, click Continue. There are three tabs you need to modify. In the FTP tab, click I Want To Use My Internet Options FTP Settings. Under HTTP, select I Want To Use My Internet Options HTTP Settings. On the ISP tab, click Internet Options in the Control Panel. Click Apply and OK. (So far, Symantec has not suggested a fix for Windows 7, which does not show any Symantec references in the Control Panel.)

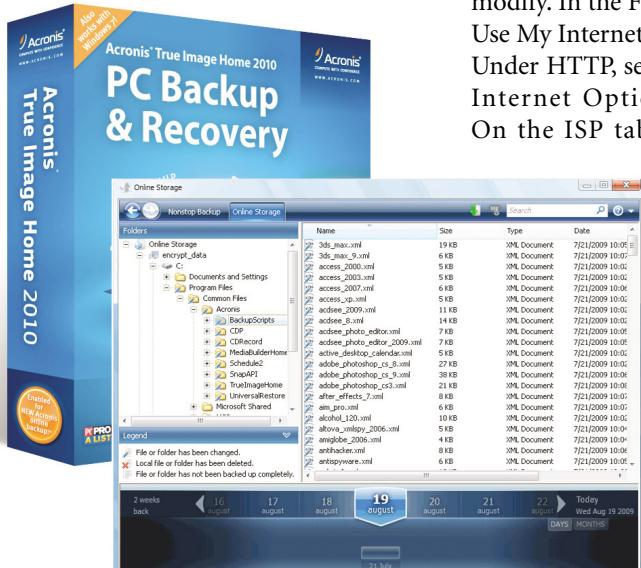
The final step is to go to Symantec's Support site and download the latest version of LiveUpdate. Go to Symantec's Support site for

Norton products and do a search for "LiveUpdate download."

**Problem:** Acronis True Image's Online Storage reports being full.

**Solution:** Backup is another utility genre and one that's so pervasive there's even a backup utility built into Windows. With backup, though, you often get what you pay for. A full backup "image" should include everything the user wants copied, including the operating system and application files (this is sometimes called a "bare metal" backup). Moreover, you ideally want that backup stored away from your home or office in case some calamity wipes out your building. Acronis True Image Home 2010 addresses both of these needs, but not without the occasional, inevitable hitch. Acronis provides all Home 2010 buyers 2GB of free online storage space for 90 days. In some cases, users may receive a message that their online storage capacity is full when it clearly is not.

The solution lies in your system containing an expired digital certificate, the bit of code that authenticates your system and its right to interact in given ways with the server. Make sure you are disconnected from the Acronis Online Backup services. In WinXP, browse to the following folder and file: \DOCUMENTS AND SETTINGS\ALL USERS\APPLICATION DATA\ACRONIS\TRUEIMAGEHOME\ONLINEBACKUP\<user\_email>\Client.crt. In Vista/Win7, the file is at: \PROGRAMDATA\ACRONIS\TRUEIMAGEHOME\ONLINEBACKUP\<user\_email>\Client.crt. Open the Client.crt file and look for a field that begins with "Valid from" followed by the issuance and expiration dates. If it's beyond the expiration date, you've isolated the problem. Delete the Client.crt file. Now, reconnect to Acronis Online Backup. The server should issue a new certificate and allow you to use your full online capacity. ■



The Internet may seem infinite, but online storage is all too finite. Acronis Online Storage, part of the True Image Home 2010 utility, could generate an error that makes it even more finite than you'd think.

BY WILLIAM VAN WINKLE

## Pest Control

# Remove Stubborn Bugs

### Ramvicrype

**Description.** Ransomware is becoming more prevalent these days, and Ramvicrype is one example of this new malware genre—but with a small twist. Generally, ransomware works by locking you out of important files (or your computer altogether). Usually, an error message appears, directing you to make a payment to get an unlock key. Like most ransomware, Ramvicrype works by examining lists of recently opened files, encrypting those documents, and adding a .VICRYPT file extension to the end of the file. When a user clicks the encrypted file, an error message appears. Unlike most ransomware, however, the error message doesn't demand payment. Instead, users are directed to a removal tool when they conduct a search based on the error message or search for the mysterious file extension. Of course, the removal tool doesn't come cheap, and it may not even remove the malware itself. While encrypting important documents is bad, this virus can get worse. Symantec points out that if a Windows system file

is recently opened, it may appear in the list of recently opened files. When this occurs, Ramvicrype might encrypt the system file causing Windows errors.

**How to tell if Ramvicrype is on your system.** Ramvicrype displays a fairly generic-looking error message that reads “viCrypt: A Problem Occured [sic], Please Restart Windows.” If you see this error message when opening a file, your system is more than likely infected. Another sign of infection is a file with a .VICRYPT extension.

**How to remove Ramvicrype using Symantec's removal tool.** Sure, you could pay big money to fix this problem, but Symantec offers a free removal tool that actually fixes the problem rather than just decrypting documents that never should've been encrypted in the first place.

Ramvicrype can spread across a network using shared files and folders. If you have more than one home computer on a network, you'll want to disable file sharing. Windows XP users should open My Computer, right-click the C: drive (or whichever drive Windows is installed on), and click Sharing

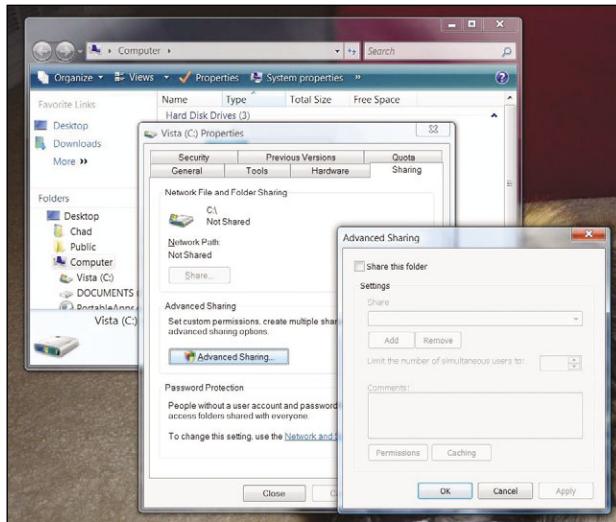


And Security. If the Sharing tab has only this link: “If you understand the risk but still want to share the root of the drive, click here,” your drive root is not shared. Click the OK button and then skip the next paragraph.

If the Sharing tab displays Local Sharing And Security and Network Sharing And Security sections, make sure their checkboxes are unchecked. Windows Vista users should click Computer in the Start menu, right-click the C: drive, and click Share. In Windows 7, click Computer in the Start menu, right-click the C: drive, highlight Share With, and click Advanced Sharing. In both Vista and Win7, click the Advanced Sharing button and remove the check mark next to Share This Folder. Perform this procedure on all shared drives on your system.

You're now ready to install the removal tool. Download a copy of the tool from Symantec at [tinyurl.com/ylqtcnc](http://tinyurl.com/ylqtcnc) and save the file to your system. Once you've downloaded the file, you should disconnect your computer from the Internet.

If you're running WinXP, you should disable System Restore by right-clicking My Computer and clicking Properties.



**Ramvicrype can spread across a network. Before you even download the removal tool, you should disable file sharing to protect other computers on your network.**

Click the System Restore tab and select Turn Off System Restore or Turn Off System Restore On All Drives.

Make sure all programs are closed and navigate to the directory where you saved the removal tool. Double-click the removal tool and click Start to begin the process. If you encounter any problems or the removal tool doesn't seem to fix the problem, restart the computer in Safe Mode. To enter Safe Mode, restart the computer and press F8 before the Windows boot screen appears. Select Safe Mode from the resulting menu and press ENTER. Once the tool finishes, you should see a report listing the results. Reboot the computer and run the tool again to make sure there are no additional infections.

Once everything is complete and you get a clean bill of health, you can re-enable System Restore, reconnect to the Internet, and, if need be, re-enable file sharing.

Note that if a system file has been compromised, you may need to download the tool on another computer and transfer it to the infected PC. In this case, it may be best to boot into Safe Mode using the method described above. This makes it less likely that the encrypted system file will be loaded.

## Koobface

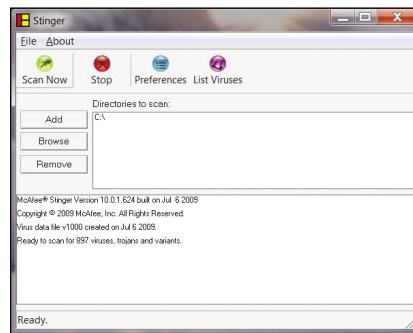
**Description.** Koobface is one of the new breeds of malware spreading through social network sites, such as Facebook and MySpace. Koobface is considered a worm because of its use of Facebook to help spread copies of itself. Koobface worms its way onto your system starting with a Facebook message from one of your friends. The message contains a link to a video and includes a generic message that entices you to view the video. If you click the link, you're taken to an online video player where you receive an error message, usually indicating that you need to install some additional codec or plug-in to view the video. The codec or plug-in is, of course, the Koobface worm itself. Once on your computer, Koobface

searches for cookies from social networking sites such as Facebook. If it finds such cookies, it begins sending out messages to your friends. Koobface's next step is to redirect searches at popular search engines such as Google to lesser known search engines. Koobface is not very destructive, but it's incredibly annoying and a good way to get people to "de-friend" you on Facebook. There are some reports, however, of more destructive strands of the Koobface worm. Some versions, for instance, may create a backdoor onto an infected system, allowing those systems to be used to attack other computers.

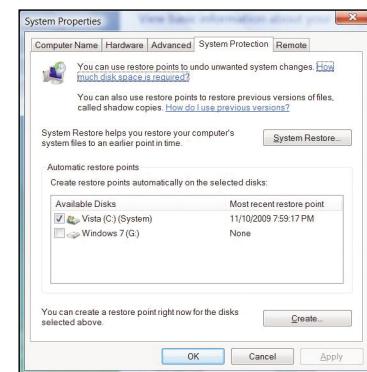
**How to tell if Koobface is on your system.** Koobface doesn't do a lot of damage, but if you're getting angry replies from friends about a message you don't remember sending, you may be infected with Koobface. In addition, if your searches are getting redirected to search engines you never use, then Koobface could be the culprit.

**How to remove Koobface using McAfee Stinger.** You can manually remove Koobface, but reputable removal tools are available to help ease the process. McAfee's Stinger is a free utility that can eliminate some common threats including Koobface. You can download Stinger at [tinyurl.com/lshqej](http://tinyurl.com/lshqej).

Once you've downloaded Stinger, double-click the icon to run it. Stinger is a standalone application that does



**McAfee's Stinger is a free download. While it doesn't provide all the protection of an antivirus utility, it can remove certain common viruses, Trojans, and other malware programs, including Koobface.**



If you encounter a problem with any removal tool, one place to start troubleshooting is Windows' System Restore. While System Restore is often helpful, it can sometimes get in your way when trying to clean an infection.

not need to install itself on the system, so you'll see the Stinger interface immediately. You'll see a list of directories to scan. If you have additional drives beyond the ubiquitous C: drive, click the Add or Browse button to add additional directories. Click Scan Now and, by default, Stinger will automatically repair any infected files it finds.

If you get an error that Stinger cannot fix an infected file, you may need to turn off System Restore. In WinXP, right-click My Computer and select Properties. Click the System Restore tab and remove the check mark next to Turn Off System Restore. In Vista, open the Control Panel, click System Maintenance (System And Security in Win7), and click System. On the left side of the window, click System Protection and uncheck the box next to your Windows drive to disable System Restore. (In Win7, select the drive, click Configure, and select Turn Off System Protection.) You should re-enable System Restore after you fix the infected file.

Once Stinger finishes, we recommended running the removal tool once more to ensure that the infection is removed. While Stinger is a helpful tool, remember that it isn't a substitute for good antivirus protection. ■

BY CHAD DENTON

# FAST FIXES

COMPILED BY KRIS GLASER BRAMBILA

## Internet Explorer 8

**Update:** This update from Microsoft resolves issues presented in a previous security update for Internet Explorer, such as a “Type Mismatch” script error that appears after installation.

**Installation:** To install this update, point your browser to [www.microsoft.com/downloads](http://www.microsoft.com/downloads) and type KB976749 in the Search field. Choose Update For Internet Explorer 8 For Windows XP (or Windows Vista or Windows 7) from the list of results. On the next page, click the Download button and save the file to your hard drive. Once the download is complete, locate the file and double-click it to begin the installation.

[www.microsoft.com](http://www.microsoft.com)

## Kodak EasyShare Version 8

**Update:** Version 8 of Kodak’s EasyShare camera software adds several new features, such as a rating system for your photos, a keyword search, and one-click uploading to YouTube.

**Installation:** To download the new version, navigate to [www.kodak.com](http://www.kodak.com) and click the Help Center tab at the top of the page. In the Start Here box, choose Software. In the Software Package field, choose EasyShare software and then click Go. On the next page, locate the Downloads section on the right side and click EasyShare Software Downloads. On the download page, first select your OS (operating system) from the drop-down menu and then click the gray Download button. Save the file to your hard drive, wait for the download to finish, and then double-click the file to begin the installation.

[www.kodak.com](http://www.kodak.com)

## PowerDVD 9 Ultra

**Update:** This update from CyberLink resolves an issue where PowerDVD could not maintain a setting for the HDMI (High Definition Multimedia Interface) output in Cinema Mode.

**Installation:** To download this update, go to [www.cyberlink.com](http://www.cyberlink.com). At the top of the page, mouse over Downloads and choose Software Updates. Locate PowerDVD in the list of products and then click the upward-pointing arrow under the Updates section. On the next page, click the Download button that corresponds to PowerDVD 9 Ultra Updates. When prompted, save the file to your hard drive, and when the download is complete, double-click the file to begin the installation.

[www.cyberlink.com](http://www.cyberlink.com)

## Acronis Backup & Recovery 10 Advanced Server

**Update:** This update from Acronis resolves several issues, including the inability to create a managed vault on a tape location after installing a previous update or to back up virtual machines via the Virtual Appliance on vSphere.

**Installation:** Point your browser to [www.acronis.com](http://www.acronis.com). At the top of the main page, mouse over the Support link and click Product Updates. On the next page, use the Login fields to enter your Acronis account information, which will give you access to all of Acronis’ updates. Next, choose the download link under Acronis Backup & Recovery 10 Advanced Server and save the file to your hard drive. When the download is complete, locate the file, double-click it to begin the installation, and follow any on-screen directions to finish.

[www.acronis.com](http://www.acronis.com)

## Firefox 3.5.5

**Update:** The newest update for Mozilla’s Firefox repairs several stability issues that were present with the release of 3.5.4, including a bug that could cause Firefox to crash on startup.

**Installation:** To download the newest version of Firefox, point your browser to [www.mozilla.com](http://www.mozilla.com). On the main page, click Download Firefox – Free. Save the file to your hard drive, and when the download is complete, start the installation by double-clicking the file.

[www.mozilla.com](http://www.mozilla.com)

## FIX OF THE MONTH

### Adobe Reader 9.2 Update

**Update:** Adobe’s Reader update addresses multiple workflow issues and security vulnerabilities that could cause the application to crash or allow a malicious user to take control of a system.

**Installation:** Go to [www.adobe.com](http://www.adobe.com). On the home page, mouse over Downloads and choose Updates from the list. In the Find Product Updates drop-down menu, choose Adobe Reader – Windows and click Go. In the list of available updates, choose Adobe Reader 9.2 Update – Multiple Languages. In the gray File Information box, click Proceed To Download and then choose Download Now. On the next page, choose your OS (operating system) and language preference and then click Continue. When Step 2 appears, choose your preferred options and then click Download Now. Save the file to your hard drive. When the download is complete, double-click it to begin the installation.

[www.adobe.com](http://www.adobe.com)

# Q & A

*Need help with your hardware or software? Looking for simple explanations on technical subjects? Send us your questions!*

Get straight answers to your technical questions from *Smart Computing*. Send your questions, along with a phone and/or fax number, so we can call you if necessary, to: *Smart Computing Q&A*, P.O. Box 85380, Lincoln, NE 68501, or email us at [q&a@smartcomputing.com](mailto:q&a@smartcomputing.com). Please include all version numbers for the software about which you're inquiring, operating system information, and any relevant information about your system. (Volume prohibits individual replies.)



Hardware

**Q** It seems that the CD-R/RW (CD-recordable/rewriteable) drive in my Dell Dimension 3000 has decided to be balky about reading discs, as well as writing to discs. However, if I insert an installation disc, the machine will happily begin to install that program. So, it seems that "finicky" is a better description. My Dell is about four years old. Is it worth my while to search out an updated driver for this drive? If so, where can I locate it? If it seems that the drive may be dying, can I put in a new CD/DVD-R/W drive? Do you have any recommendations as to a reputable brand and/or software for this little project?

**A** Our hunch is that your drive is probably just a bit dirty. It's not unusual for a buildup of dust to make the drive's lens act erratically. Commercially made installation discs are manufactured with a different process than CD-R/RW technology, so that would explain why the installation discs can still be read properly.

The simplest way to clean your drive is to open the drive tray and use a can of

compressed air to gently blow out any dust. Don't tilt the can of compressed air, as this will blow some of the compressant (in liquid form) into your drive.

Updating your drivers probably won't help with the drive's performance, as the issue is most likely a mechanical problem, not a software issue. Keeping up-to-date on drivers is always a good idea, however, and you should be able to download the latest drivers for your Dimension at [tinyurl.com/6ub8t](http://tinyurl.com/6ub8t).

If you want to replace your drive, you can easily swap a new drive for your old drive. CD and DVD drives are quite affordable. Quality DVD burners are available for approximately \$30. Be sure that you purchase a drive with an IDE (Integrated Drive Electronics) interface, not the newer SATA (Serial Advanced Technology Attachment) interface, because your Dimension 3000 doesn't support that. Pioneer, LG, Sony, and Plextor are a few reputable companies that offer quality drives.

Installing the drive is a straightforward process, and Dell has excellent documentation at [tinyurl.com/5dg7k](http://tinyurl.com/5dg7k). ▀



This Old Computer

**Q** I have a 3-year-old HP desktop running Windows XP Professional. My problem is that my computer seems really sluggish. Starting applications takes a long time, and it just doesn't seem to have the "zip" it had when I first bought it. My friends say I should expect to buy a new computer every three to four years. Should I take their advice and start shopping for a new computer?

**A** Computers used to improve dramatically over time, as vendors introduced "faster" models that took advantage of Moore's Law—the number of transistors on a CPU doubles every 18 to 24 months. This speed increase made computers more responsive and helped make them more affordable.

Moore's Law is still working in our favor, but technology has shifted from faster CPUs to more CPUs. Hard drives have also grown in size, and the amount of memory that current computers can use has risen. So, a computer that's three years old is far behind what today's computers can offer.

However, not everyone needs the fastest computer on the block. And hard drives, as well as memory, can be upgraded if needed. For many users, upgrading their Internet connections to high-speed or broadband connections can make their computing experiences far more enjoyable than a new computer would.

Many of the computers we maintain and repair are often described as slow, and upon

further examination, simply need a little tender loving care to restore them to their original levels of performance. One of the most common problems is disk defragmentation. As your hard drive fills up, it has to try to find space for each application you install. Defragmenting your hard drive will arrange your applications in a more efficient pattern that can improve application start times. To start Disk Defragmenter in WinXP/Vista/7, click Start, All Programs, Accessories, System Tools, and Disk Defragmenter.

In addition to hard drive fragmentation, another common cause for a computer to slow down is malware. Like a leech, malware siphons off your computer's resources. The best way to avoid malware is with a good antivirus or security application. One example is Microsoft's Security Essentials (free; [www.microsoft.com/Security\\_Essentials](http://www.microsoft.com/Security_Essentials)) for WinXP/Vista/7.

Our last-ditch effort to restore a computer to its original level of performance is to reformat the hard drive and reinstall Windows. Reinstalling Windows results in a pristine

computer, but it also entails the most work. You'll need to have a good backup of your important data, the installation discs for your favorite applications, and the better part of a day. You can read *Smart Computing*'s "Reinstall Windows XP" at [tinyurl.com/yvursx](http://tinyurl.com/yvursx) to get an idea of what's involved and the best practices to make it as easy as possible. If you're thinking of reinstalling, you may want to see if upgrading to Win7 would be worth the added cost. Unless the hardware specifications of your computer are hopelessly out-of-date, Win7 should run well on a 3-year-old computer.

Buying a new computer is an exciting way to keep up-to-date and ensures you have the latest and greatest technology. Some users find that even small improvements in performance are worth staying on the "upgrade cycle." If you play a lot of graphically intensive games, for example, the latest video cards will always give you a better experience. But for the average computer user, a little TLC will often improve a computer's performance to an acceptable level. ■



## Hardware

**Q** I have a 2.5-inch hard drive from an old computer. I want to format the drive and use it as a USB backup drive. When I try to remove a file, a message tells me that it is protected and Access Is Denied and that the file is Read-Only. Every time I try to format the drive, a message reads, "Make sure disk is not full or write-protected and that the file is not currently in use." Is there a way for me to format the drive?

**A** Formatting external drives is sometimes blocked by antivirus software or security suites. Try temporarily disabling your antivirus/security software and then formatting the drive. You don't need to delete the existing contents of the drive, because the formatting process will essentially remove access to the old files. ■



## Hardware

**Q** I purchased a Dell Mini 10v netbook. I have several programs that I want to install, but I don't want to spend the money on an external optical drive. How do I transfer the setup files from the installation disc onto a flash drive?

**A** With great portability comes sacrifice. The appeal of a netbook is its diminutive size and feather-like weight. But sometimes, a netbook's lack of peripherals can be confounding. To install software on one from CD, you'll first need access to a computer that

has a CD drive and a flash drive large enough to hold the software. CDs only hold approximately 700MB per disc, so determine the largest install you intend to do, and then start shopping for an appropriately sized-flash drive. We wouldn't recommend anything smaller than 2GB because flash drives have dropped in price so quickly, and because Murphy's Law will find you with a software package that's 2.1GB. Once you've purchased a drive, it's simply a matter of copying the entire contents of the CD onto the flash drive. ■

# Frequently Asked Questions

*Answers to users' most common questions about Upgrading To Windows 7*

If you want to keep the files, settings, and applications currently on your PC, you'll need to be careful about which version of Win7 you upgrade to.

## FAQ My computer currently runs a 32-bit version of Windows. Do I need to purchase a 32-bit version of Windows 7?

Not necessarily. Most PCs manufactured in the last three to four years feature 64-bit processors, which is all the hardware your computer will need to work with a 64-bit version of Windows.

To determine if your Windows Vista PC's processor supports 64-bit computing, click the Start button, select Control Panel, and choose System And Maintenance. Click Performance Information And Tools and select View And Print Details. Under the System section, look for the 64-bit Capable field and see whether it is marked Yes or No. If you don't see a 64-bit Capable field, you're already running a 64-bit version of Windows.

Keep in mind that you'll need to perform a clean upgrade installation (one that wipes all data off your hard drive before installing the operating system) when you replace a 32-bit version of Windows with a 64-bit version. The same goes for switching from a 64-bit version to a 32-bit version. Microsoft refers to the clean upgrade installation as a "custom" upgrade.

## FAQ What's the difference between 32-bit and 64-bit versions of Windows 7?

One of the most noteworthy differences is that 64-bit versions of Windows are capable of using 4GB or more of memory. With a 32-bit edition of Windows, you could install more than 4GB, but your PC won't use more than 4GB. (In fact, it will likely use a little less.) The more memory your PC can use, the more efficiently it'll be able to run multiple applications at the same time.

Applications designed to run in 64-bit environments will also run faster when used on a 64-bit operating system. Although hardware and application compatibility may

be a concern for users with older software, hardware, and peripherals, Win7 offers improved support for 32-bit software, and most component manufacturers offer 64-bit drivers and firmware upgrades for 64-bit operating systems. If in doubt, buy the 32-bit version.

## FAQ Can I upgrade from any version of Windows Vista to any version of Windows 7?

If you want to keep the files, settings, and applications currently on your PC, you'll need to be careful about which version of Win7 you upgrade to. Similar to upgrading from Windows XP to Vista, you can only perform an upgrade installation (one where your files, settings, and applications stay on the PC) from certain versions of Vista to certain versions of Win7. Otherwise, you'll need to run the custom installation, which requires you to reformat your hard drive and will delete the existing personal information on your PC.

People running Vista Home Premium can only perform upgrade installations of the Home Premium or Ultimate versions of Win7. If you run Vista Business, you can only upgrade to Win7 Professional or Win7 Ultimate. And if you run the Ultimate version of Vista, the Upgrade path is only available in the Win7 Ultimate edition.

See Microsoft's upgrade chart ([tinyurl.com/yoalg7](http://tinyurl.com/yoalg7)) to make sure you can perform an upgrade installation.

## FAQ Will I need to make sure that my current software is compatible with Windows 7?

Microsoft indicates that most programs designed for Windows Vista will also run on Win7. Visit the Windows 7 Compatibility Center ([tinyurl.com/yknvr2g](http://tinyurl.com/yknvr2g)) or check the software manufacturer's Web site to be sure. ■

## ACTION EDITOR

Are you having trouble finding a product or getting adequate service from a manufacturer? If so, we want to help solve your problem. Send us a description of the product you're seeking or the problem you're having with customer service. In billing disputes, include relevant information (such as account numbers or screen names for online services) and photocopies of checks. Include your phone number in case we need to contact you.

Letters may be edited for length and clarity; volume prohibits individual replies.



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**(402) 479-2104**

# magicJack & Nuance Issue Replacements

*I bought a magicJack in 2008, and it worked fair for a year or so. This summer, I spent hours chatting with tech support only to end up with a magicJack that worked sometimes.*

*I had hoped that when I went to a new computer, the device might work. I recently upgraded to a new computer with a quad-core i7 processor and 64-bit Windows 7 operating system. magicJack did not work from the start. Most of the time, the program would simply say the device was not plugged in.*

*Today I started a chat session with their support. I went through at least five agents. Then they would say restart the computer and everything will work. Each time it did not work, and I had to start over with a new chat. I asked the magicJack technical support staff for a phone line so we could talk and speed things up, but they didn't provide one. After a few hours of this, I asked for my money back, but they said they do not issue refunds after 30 days.*

*I had asked for a replacement device and was told that if I went to the Web site and entered my credit card information, they would charge me \$39.95 until they received the non-working device. I told them I no longer trust them after the runaround I have received with no way to call them.*

*I have offered to mail the device to them and when they receive it they can send the replacement. They said that is not their policy.*

*I would appreciate any help with this.*

and your computer and lets you make local and long-distance phone calls through an online account) who looked into the situation. She contacted a magicJack technical manager, and he determined that Bill's device had become corrupt. The magicJack representative said she would send Bill a new device free. Also, magicJack offered to help Bill set up his new unit and transfer Bill's number to the new device.

*Sometime in August 2009, I purchased a speech-recognition software program, Dragon NaturallySpeaking 10 Standard. When I tried to install the program, I got an error message that said a cabinet file was corrupt, and the installation stopped. I wrote Nuance (the maker of Dragon NaturallySpeaking 10 Standard) a letter about my problem and sent them the software program in the original box with all the contents. Nuance did call back and said that they would send me a replacement, but no replacement has ever come. Help.*

Robert  
San Juan, Puerto Rico

When Action Editor got in touch with Nuance, they investigated the case to see what had happened with the promised copy of Dragon NaturallySpeaking 10 Standard (speech recognition software that turns your spoken words into text on your computer). After searching the customer service records, Nuance found Robert's case and realized it hadn't yet sent the replacement software. For his troubles, Nuance sent him a copy of Dragon NaturallySpeaking Preferred, which is an upgrade from the Dragon NaturallySpeaking 10 Standard software. ■

Action Editor was able to get in touch with the media relations representative from the company that makes the magicJack (a tool that connects to both your home telephone

# Open House

**H**i. Welcome to our open house. We're not here. All the lights are off, but feel free to look around anyway. If you find something interesting or valuable, feel free to take a copy. While you're at it, if you want to use our Internet connection, go right ahead. We don't really care whether you're doing something harmless, such as checking email, or nefarious, such as sending barrages of spambot V1agr@ ads. We'll probably never even know you were here. Enjoy.

As strange as this sounds, I've received similar invitations from several of our neighbors, and even from complete strangers. Avoid hosting these kinds of open houses by making your wireless network more secure.

Let's start with turning on encryption. Despite all the dire warnings in every article ever written about wireless networks, a few people still fail to require even a basic passkey to access their network. A couple times we've been without an Internet connection when moving or switching providers. While searching for one of Philadelphia's famous (and very elusive) "city-wide" Wi-Fi access points, I've discovered the occasional home network that's completely open to the public. No password, no encryption, no nothing. In fact, more than once the upstairs computer, which doesn't get a strong signal from our router downstairs, has automatically connected to someone else's WLAN (wireless local area network). We usually don't even notice until we try and access our network-shared printer. I can't say that I've never hitched a ride on one of these networks to do a quick email check while we're sans Internet, but usually I'll just cash in on the excuse to head to the coffee shop. Still, you shouldn't tempt me and others worse than me. Take ten minutes and apply WPA (Wi-Fi Protected Access) encryption to your router and configure each (authorized) machine that's going to connect.

You don't have to be so obvious to be vulnerable, however. I recently helped a neighbor set up a wireless printer at his new home office. It was the same model I'd helped him set up at work, with the same laptop traveling back and forth. He wisely set a strong passkey for his wireless network and wrote it down for me. So far so good, except we ran into some trouble getting the computer connected through the router to the printer. I wanted to know if the printer was even a recognized device on the network, which you can always tell from a router's admin utility. He was away, on a quick trip to the office for manuals and CDs, so I took a guess. I simply navigated to his gateway address and tried the default password for his router model. Sure enough—I was in. Now, I was there as a helpful friend (and in exchange for gardening assistance), so I wasn't about to hijack



his network. But the next guy making the same guess probably wouldn't have been so magnanimous. Moral of the story? Change your router's default admin password.

While you're at it, give your network a non-personal SSID (Service Set Identifier) name. I can't count how many networks I've seen named simply "comcast" or "linksys"—which are dead giveaways that the owners have left most of the defaults in place. I've also seen network SSIDs named for their physical address. Wireless security has come a long way, but a dedicated and knowledgeable hacker with a few basic software tools can still find a way to break into most consumer-grade networks. If someone can combine sensitive electronic information (account numbers, email addresses) with sensitive physical artifacts (paper bills or statements from the mail or trash), they can do a whole lot more damage than with just one of the two. So don't name your network after your address or unit number. Yes: Mister or Miss "wireworks125," I'm talking to you.

Some of the same people who'd never dream of leaving the house unlocked, even for a quick run to the corner store, are completely unconcerned with leaving their wireless networks wide open. Of course, I'm one of the good guys, so I'd never take advantage of such opportunities. But can you always count on the people living in (and visiting) your neighborhood to be so upstanding? ■

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BY GREGORY ANDERSON

Gregory Anderson is a regular contributor to Smart Computing and several other technology publications. He keeps a sharp eye (with the help of thick glasses) on computing trends and enjoys working with geeks of all stripes—most of the time. Share your woeful tales of weak wireless security at [gregory-anderson@smartcomputing.com](mailto:gregory-anderson@smartcomputing.com).

## Gorillapod SLR-Zoom

\$49.95 | Joby | [www.joby.com](http://www.joby.com)

This handy camera tripod does exactly what it's supposed to do. It grips (or stands on) just about anything, keeping your camera steady. The Gorillapod SLR-Zoom's legs bend around corners or wrap around poles with ease, but they don't slip or lose shape under the weight of the camera. Those gray stripes on each leg are rubber rings that help the Gorillapod keep a tight grip.

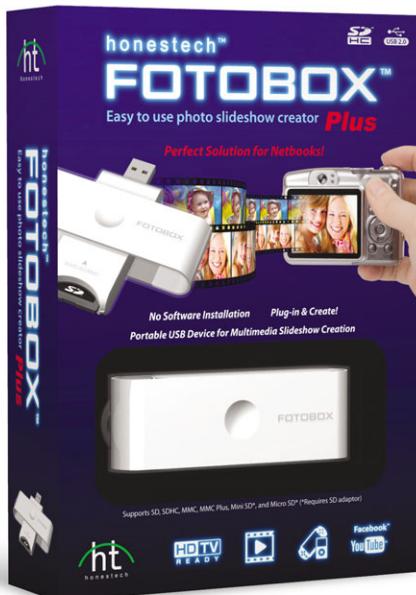
You can attach your D-SLR (digital single-lens reflex) camera directly to the Gorillapod SLR-Zoom, but if you'd like more control over the camera's angle, consider adding the Joby Ballhead (\$39.95) to the mix. I know a few amateur photographers who would benefit from the Ballhead's built-in level.



## D5000

\$679.95 (estimated street price) | Nikon | [www.nikonusa.com](http://www.nikonusa.com)

Sure, D-SLRs are bulkier and more expensive than compact digital cameras, but any enthusiast will agree that D-SLRs take better photos (by virtue of their larger image sensors, among other technology). The Nikon D5000 bridges the casual user-professional gap nicely by providing quality photos and features that both types of users can appreciate, such as the extendable display. If you need to have the back of the camera facing away from you (such as when you shoot over a crowd or when you put the camera near the floor and aim upward), you can slide out the display and angle it toward you (and even rotate it) so that you can see the shot you're framing.



## Fotobox

\$79.95 | Honestech  
[www.honestech.com](http://www.honestech.com)

The Fotobox is a two-piece combo that lets you quickly create great slideshows from the photos on your camera's SD (Secure Digital) card. The first piece is the physical adapter, which accepts the SD card and plugs into your computer's USB port. (Some notebooks have SD card slots, but many don't.)

That's when the other half of Fotobox kicks in. The Fotobox software starts and lets you create a slideshow, complete with transitions (which are the animations that make pictures appear to move or fade away). Once the slideshow is ready, Fotobox helps you burn it to a DVD, prepare it for YouTube ([www.youtube.com](http://www.youtube.com)), or save it to a format you can watch from your PC, among other options.

*Compiled by Joshua Gulick*

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